



COMMISSION MEETING MINUTES  
November 24, 2020

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Chair Elofson called the virtual meeting to order and Ms. Cascio read the roll call of HRSD Commissioners.

Name	Title	Present for Item Nos.
Elofson, Frederick N.	Commission Chair	1-23
Lynch, Maurice P.	Commission Vice-Chair	1-23
Glenn, Michael E.	Commissioner	1-23
Lakdawala, Vishnu K.	Commissioner	1-23
Levenston, Jr., Willie	Commissioner	1-23
Rodriguez, Stephen C.	Commissioner	1-23
Taraski, Elizabeth	Commissioner	1-23
Ward, Molly Joseph	Commissioner	Absent

1. **Awards And Recognition**

**Action: No action is required.**

**Brief:**

**a. Promotion Announcement**

Mr. Henifin introduced Ms. Deloris Haney who was recently promoted to Customer Care Manager. Delores began her career at HRSD in 2009, as a Customer Care Representative in the Call Center and rotated laterally to Payments and Billing work centers. While working as a Customer Care Representative, Deloris took advantage of HRSD's Continuing Education opportunities and successfully completed her Bachelor's degree in Business with a concentration in Finance from Virginia Wesleyan University in 2014. In 2015, she was promoted to Accounts Receivable Technician in Billing and was promoted again to the Billing Supervisor in 2018. Deloris has exceptional technical skills and has brought energy, enthusiasm and a positive attitude to our team. We are very proud of her accomplishments in Customer Care.

**b. National Association of Clean Water Agencies (NACWA) Awards**

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



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The following treatment plants were recognized for outstanding compliance during calendar year 2019, a remarkable accomplishment:

<b><u>Plant</u></b>	<b><u>Award</u></b>
Army Base Treatment Plant	Gold
Atlantic Treatment Plant	Platinum
Boat Harbor Treatment Plant	Platinum 18
Chesapeake-Elizabeth Treatment Plant	Gold
James River Treatment Plant	Platinum 6
Nansemond Treatment Plant	Platinum 18
Virginia Initiative Plant	Platinum 24
Williamsburg Treatment Plant	Platinum 25
York River Treatment Plant	Platinum 12
Central Middlesex Treatment Plant	Gold
King William Treatment Plant	Gold
Urbanna Treatment Plant	Gold
West Point Treatment Plant	Silver
Surry County Treatment Plant	Gold

**Attachment:** None

**Public Comment:** None



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2. **Consent Agenda**

**Action:** Approve the items listed in the Consent Agenda.

**Moved:** Stephen Rodriguez

**Seconded:** Vishnu Lakdawala

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Brief:**

a. Approval of minutes from previous meeting.

b. Contract Awards

1. [King William Treatment Plant Improvements Phase I](#) \$1,100,000

c. Task Orders

1. [Atlantic Service Area Automated Diversion Facilities Phase I](#) \$956,000

2. [Bethel-Poquoson Interceptor Force Main Replacement Phase II](#) \$220,609

3. [Bloxoms Corner Force Main Replacement](#) \$321,500

4. [James River Recharge Wells](#) \$981,177

d. Sole Source

1. [Aerobic/Anaerobic Pulse Flow Respirometer System](#)

2. [Schwing Bioset Biosolids Hydraulic Pump Replacement Parts](#)

e. HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award

1. [Microsoft 365 Migration](#) \$212,784

2. [Water Quality Services Building Phase II](#) \$633,165

**Item(s) Removed for Discussion:** None

**Attachment:** [#1](#)

**Public Comment:** None



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3. **Residential Customer Survey**

**Action:** No action is required.

**Brief:** SIR Research recently completed HRSD's biennial online customer satisfaction survey of our residential customers. SIR Senior Advisor Chris Kidd shared [highlights](#) of the [survey results](#) with the Commission.

**Discussion Summary:** Staff believes it is important to increase awareness, familiarity and satisfaction in the community. We are working towards that goal by increasing social media presence and with outreach activities at the SWIFT Research Center. We think customer satisfaction should change with our efforts, but it is challenging to make progress right now with the pandemic. We need to be able to build awareness because awareness of what we do also helps build value in the eyes of the customer.

Satisfaction levels were segmented by the type of customer (HRSD or HRUBS respondents). Scores amongst the HRSD respondents were statically higher on each question. They were not specifically asked if they knew the difference between city and HRSD billing. It is very challenging to differentiate between city and HRSD billing especially with the combined bills.

Generationally, the millennial respondents claimed to be more familiar with the SWIFT project. Survey results for level of interest and how important the SWIFT project is showed Boomers were slightly more interested and felt the project was more important. There may be more of an interest in environmental activities.

Commissioner Taraski asked if the survey was segmented by city and if respondents in Suffolk were more aware of the SWIFT project. Mr. Kidd said he would look back at those numbers and will follow-up.

**Attachment:** [#2](#)

**Public Comment:** None



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4. **Essential Worker Recognition During COVID-19**

**Action:** Approve a one-time payment of \$135 for each employee in recognition of their hard work as an Essential Worker during the COVID-19 pandemic.

**Moved:** Willie Levenston  
**Seconded:** Vishnu Lakdawala

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**Brief:** The U.S. Department of Homeland Security included wastewater employees in the definition of Essential Workers during this COVID-19 pandemic. This highlights the importance of HRSD’s role in protecting public health and the environment as operations never ceased. In recognition of our employee’s hard work during this pandemic, staff is recommending a one-time payment of \$135 (approximately \$100 after tax) to be paid in December. Funding for this recognition will be from unanticipated and non-budgeted revenues and/or unused budgeted expenses such as travel that may not be utilized in Fiscal Year 2021. As of the end of October, revenues exceeded expenses, including factoring in aging balances greater than 60 days. The estimated cost for 845 full and part-time employees and interns is approximately \$114,000.

Unfortunately, HRSD did not qualify for CARES Act funding that many localities in the region used to give their essential workers hazard pay. As an example, the City of Norfolk provided \$2,000 of hazard pay for essential workers and \$250 (pre-tax) to other employees that was “meant to be a recognition of city staff who have done their best to keep the gears of city government turning.”

**Attachment:** None

**Public Comment:** None



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5. **New Positions in Operations Department – Plant Operators**

**Action:** Authorize the addition of seven Plant Operator Positions in the Operations Department.

**Moved:** Vishnu Lakdawala

**Seconded:** Maurice Lynch

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Brief:** Wastewater treatment requirements and the expectations of the Plant Operator (PO) position are becoming more complex, interrelated and demanding. These demands are partially driven by rigorous treatment efforts and expectations, coupled with a trend toward operational complexity over capital/resource intensity.

For a PO to be successful, they must be prepared to transition from typical shift duties such as collecting samples and recording data, to distilling information at a more executive level. Staffing reorganizations in the Operations Department over the past several years have helped manage this growing complexity by providing effective support from Treatment Process Engineers and other support staff. Ultimately, however, POs are generally alone at a work center 16 hours per day, Mondays through Fridays, and 24 hours per day on weekends and must understand complex treatment processes, make good decisions, understand priorities, troubleshoot solutions, ask questions and be able to discern the right time to call for help.

To help alleviate the PO's growing burden, staff is currently expanding and improving the Apprenticeship Program's Plant Operator trade course offerings, embarking on a distributed control system high performance graphics (HPG) and Alarm Management solution and modifying job requirements and the availability of operators available to work on "shift".

In addition, staff recommends that HRSD change its established shift rotation schedule. Currently, POs, when fully staffed, rotate shift assignments (nights, days, evenings) every week. This frequent rotation hampers employee retention and job satisfaction; disrupts the employee's ability to adjust to changing work and sleep schedules; limits HRSD's ability to enhance operator skills since most training takes place during normal day hours; and isolates the employee from their work center and other HRSD functions. Staff is, therefore, requesting the authority to hire seven new PO positions effective January 1, 2021. The addition of these new staff, coupled with modifying existing job requirements will enable staff at the Virginia Initiative, Boat Harbor and Army Base Treatment Plants to move to a schedule with a 6-week rotation, and all other major treatment plants to move to a schedule with a 7-week rotation (once fully staffed).

After the addition of these seven PO positions, staff anticipates the ability to eliminate 30 PO positions over the next five years (excluding staffing needs associated with the Sustainable Water Initiative for Tomorrow (SWIFT) expansions). These staffing reductions





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should be made possible with the closure of the Chesapeake-Elizabeth and Boat Harbor Treatment Plants, the closure of the Army Base incinerator and improvements of the distributed control systems at the Atlantic Treatment Plant.

The addition of these positions has a current fiscal year budgetary impact of approximately \$211,000 and can be managed within the existing Operations Department fiscal year 2021 budget authorization.

Staff provided a [briefing](#) regarding these recommendations.

**Discussion Summary:** Staff is working with a consultant to standardize HPG screens. Wastewater facilities across the United States do use HPG screens but they are not standardized across all platforms.

Personnel staffing and rotation scheduling throughout the United States varies, but none have a four-week rotating shift schedule like HRSD. Staff has worked to change this rotation for a number of years. A shift schedule modeled similar to fire stations will not benefit HRSD because firemen live at the facility for the duration of their shift. Staff have reviewed multiple shift schedules including 8, 10 and 12-hour shifts. Employees in these positions have provided their feedback. Generally, they like the number of hours in the shift; they just do not like the four-week rotation.

Staff explained the training and licensing requirements including salary levels for plant operators in detail. Since HRSD is the only wastewater facility in the region, new employees generally are not licensed and receive on-the-job-training to grow into the position. Utilities across the country are experiencing similar issues.

Positions to be eliminated when the Chesapeake-Elizabeth and Boat Harbor Treatment Plants close have been identified. Employees in those positions have voluntarily agreed to retire upon the facility closure. New employees at these facilities are guaranteed a position at another facility and will not face a layoff. There is also a lot of turnover and natural attrition that occurs which attributes to the majority of the staffing reduction. Staff assured the Commission that positions will only be filled when staff is confident the natural attrition will ensure long-term employment. No one will be brought on board into a permanent position that is planned to be eliminated without a plan for accommodating that person in another position at that time with minimal over-hire requirements.

**Attachment:** [#3](#)

**Public Comment:** None



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6. **Army Base Treatment Plant Administration Building Renovation (2021)  
Initial Appropriation**

**Action:** Appropriate total project funding in the amount of \$1,014,800.

**Moved:** Michael Glenn

**Seconded:** Willie Levenston

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**CIP Project: AB011900**

**Project Description:** This project will renovate the existing administration building and construct a small adjacent building for electrical and instrumentation use at the Army Base Treatment Plant. Core work for the administration building includes additional administration offices, lunchroom, window replacement, conference room, lab and control areas, women's and unisex bathrooms.

**Funding Description:** The total project cost estimate of \$1,014,800 includes approximately \$232,600 in design phase services, approximately \$667,200 in construction phase costs, and \$115,000 of project contingency and is based on a Class 5 CIP-prioritization level cost estimate prepared by HRSD. Preliminary engineering services will be completed by Guernsey Tingle Architects, P.C. under the Architectural/Mechanical/ Electrical Services annual services contract.

<b>Schedule:</b>	PER	December 2020
	Design	March 2021
	Bid	July 2021
	Construction	September 2021
	Project Completion	March 2022

**Attachment:** None

**Public Comment:** None



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7. **Boat Harbor Treatment Plant Transmission Force Main Section 1 (Subaqueous)  
Initial Appropriate and Task Order (>\$200,000)**

**Actions:**

- a. **Appropriate total project funding in the amount of \$78,778,799.**
- b. **Approve a task order with AECOM Technical Services, Inc (AECOM) in the amount of \$1,768,020.**

**Moved:** Maurice Lynch

**Seconded:** Elizabeth Taraski

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**CIP Project:** BH015710

<b><u>Contract Status:</u></b>	<b><u>Amount</u></b>
Original Contract with AECOM	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$1,768,020
Total Value of All Task Orders	\$1,768,020
Revised Contract Value	\$1,768,020
Engineering Services as % of Construction	2.9%

**Project Description:** The project consists of the subaqueous crossing of the James River to convey screened and de-gritted wastewater from the proposed Boat Harbor Pump Station to the Nansemond Treatment Plant. The proposed transmission force main is anticipated to constructed by two different methods. Horizontal directional drilling will be used under the shipping channel and marine open-cut construction will be used for the remaining pipe. This project is a complex project due to the horizontal directional drill length, required permits and stakeholder coordination, and unique aspects associated with working on the James River. Commission approved the use of alternative project delivery for this project in August 2020.

**Task Order Description:** This task order will provide a Basis of Design Report, indicative design, and supporting information to a level of sufficient detail to convey major design features and intent. This effort will result in the development of Bridging Documents for use in procuring a design-build team. This task order will provide support to HRSD with initial permitting efforts. A significant effort proposed within this task order is the planning and execution of a geotechnical investigation along the proposed pipeline route, that will provide critical data for the design build teams to plan, design, and price the proposed project. This task order will be coordinated with the Boat Harbor Treatment Plant Pump Station Conversion and Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Phase II projects.



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**Analysis of Cost:** The cost for this task order is based on a negotiated scope of work, based on a detailed estimate of labor hours and direct costs. This task order will be issued as an amendment to the Professional Services Agreement with AECOM for Program Management of the SWIFT Full-Scale Implementation Program. The labor rates for each staff category in the proposed fee are consistent with the rate structure within the Agreement, as approved for FY2021. Without the potential additional services, the proposed engineering services fee is 1.3% of the construction cost. This ratio compares well with the PER effort for two previous HRSD projects that included horizontal directional drilling of a force main under a waterbody. The proposed geotechnical investigation is 1.6% of the construction cost which makes up the additional services budget and will be managed as a not to exceed amount due to the variable nature of this work.

<b><u>Schedule:</u></b>	Design services begins	November 2020
	Preliminary design approval and begin RFQ/RFP process	April 2021
	Selection of Design-Build firm / establish CCL	January 2022
	Detailed design development/Stipulated Fixed Final Price	September 2022
	Construction Completion	June 2025

**Attachment:** None

**Public Comment:** None



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8. **Inflow Reduction Program – Phase I  
Initial Appropriation and Contract Award (>\$200,000)**

**Actions:**

- a. **Appropriate total project funding in the amount of \$2,000,000.**
- b. **Award a contract to Ramboll Americas Engineering Solutions, Inc. with an estimated amount of \$302,230**

**Moved:** Stephen Rodriguez

**Seconded:** Michael Glenn

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**CIP Project:** GN018000

**Type of Procurement:** Competitive Negotiation

<b><u>Proposers</u></b>	<b><u>Technical Points</u></b>	<b><u>Recommended Selection Ranking</u></b>
Ramboll Americas Engineering Solutions, Inc.	77	1
Jacobs Engineering Group Inc.	76	2
Dewberry Engineers Inc.	75	

**Contract Description:** A Public Notice and Request For Proposals was issued on August 9, 2020. Three firms submitted proposals on September 15, 2020, and all firms were determined to be responsive and deemed fully qualified, responsible and suitable. All firms were short listed, interviewed and technically ranked as listed above. The Professional Services Selection Committee chose Ramboll Americas Engineering Solutions, Inc. whose professional qualifications and proposed services will best serve the interests of HRSD. The contract award includes study, investigation, development of remedial measures, and construction oversight in two tasks. Task 1 addresses private sewer assets within Hampton University and will demonstrate effectiveness of investigation and remediation techniques. Task 2 involves developing a strategy for system-wide inflow evaluation and rehabilitation. Construction related efforts will be provided thru HRSD’s Sewer Repairs and Condition Assessment contract.

**Project Description:** This project includes the identification and reduction of points of inflow into private, locality, and HRSD owned sanitary sewer systems. Identification may include data analysis, smoke testing, flow and conductivity monitoring and other field investigations. Inflow reduction strategies may include sealing of manholes, elimination of direct connections; as well as sealing and replacement of laterals and cleanouts. The Regional Wet Weather Management Plan (RWWMP) has identified basins in current need



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of inflow reductions and areas of saltwater inflow have been identified through data analysis. Areas to implement inflow reduction strategies will be targeted based on susceptibility to saltwater inflow and through further data analysis of the basins identified in RWWMP. HRSD will coordinate identification and reduction of inflow with locality partners.

**Funding Description and Analysis of Cost:** The scope and fee were negotiated on a time and materials basis with an estimated total value of \$302,230. The hourly rates and estimated hours are appropriate for this task order.

<b><u>Schedule:</u></b>	Task 1 Study and Rehab Report	April 2021
	Task 2 Evaluation and Strategy Defined during Task 1	TBD

**Attachment:** None

**Public Comment:** None



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9. **James River Land Improvements  
Initial Appropriation and Contract Award**

**Actions:**

- a. **Appropriate total project funding in the amount of \$2,095,000.**
- b. **Award a contract to Vanasse Hangen Brustlin, Inc.**

**Moved:** Stephen Rodriguez

**Seconded:** Maurice Lynch

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**CIP Project:** GN016344

**Type of Procurement:** Competitive Negotiation

<b><u>Proposers</u></b>	<b><u>Technical Points</u></b>	<b><u>Recommended Selection Ranking</u></b>
Vanasse Hangen Brustlin, Inc.	88	1
Kimley Horn & Associates Inc.	86	2
A. Morton Thomas & Associates, Inc.	85	
Johnson Mirmiran & Thompson Inc.	79	
Tetra Tech Inc.	73	

**Contract Description:** A Public Notice was issued on July 19, 2020. Thirteen firms submitted proposals on August 25, 2020, and all firms were determined to be responsive and deemed fully qualified, responsible and suitable to the requirements in the Request for Proposals. Five firms were short listed, interviewed, and technically ranked. The proposal submitted by Vanasse Hangen Brustlin, Inc was ranked by technical points to be highest qualified. 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 James River Land Improvements project.

**Project Description:** This project will provide for construction of improvements to the land surrounding the James River Treatment Plant, including development 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.

**Analysis of Cost:** The project cost estimate is \$2,095,000, which was based on HRSD's initial offer to the City of Newport News to construct the Flax Mill Creek Trail. However, the current version of the Land Purchase Agreement reflects additional assets as requested by



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the City of Newport News. Additional appropriations may be requested once the Agreement has been approved. In anticipation of the City of Newport News approval of the Agreement, HRSD has negotiated a proposed scope and fee with Vanasse Hangen Brustlin, Inc for preliminary engineering services. This initial task order is less than \$200,000.

<b><u>Schedule:</u></b>	PER	November 2020
	Design	April 2021
	Bid	January 2022
	Construction	March 2022
	Project Completion	December 2026

**Attachment:** None

**Public Comment:** None





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10. **Nansemond Treatment Plant Digester Capacity Upgrades  
New CIP and Initial Appropriation**

**Actions:**

- a. **Approve a new CIP project (NP014700) for the Nansemond Treatment Plant Digester Capacity Upgrades**
- b. **Appropriate total project funding in the amount of \$10,500,000**

**Moved:** Willie Levenston

**Seconded:** Stephen Rodriguez

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**CIP Project:** NP014700

**Project Description:** This project will improve and replace peripheral equipment associated with the Nansemond Treatment Plant (NP) anaerobic digesters in advance of the expansion project that will allow for receiving wastewater from the Boat Harbor Treatment Plant (BH) service area. The digester mixing pumps and piping, centrifuge feed pumps, process boilers, heat exchangers, digester gas collection system, waste gas burners, digestion process instrumentation and controls, and digestion process electrical systems will be evaluated under this CIP for capacity and condition. The required upgrades or replacement to meet projected 2026 loading will be designed and constructed as part of this project.

Wastewater from the Boat Harbor service area is to be diverted and combined with existing NP primary influent beginning in first half of 2026. The additional loading on NP will require capacity upgrades to the anaerobic digestion process, including the ability of the current digestion systems to treat pre-dewatered primary and waste activated solids up to a concentration 7% total dry solids. By providing the capability of treating thicker solids in the existing anaerobic digesters, this project alleviates the need to construct additional anaerobic digester volume, which reduces overall NP upgrade costs and reserves limited on-site space for future needs.

The upgrades provided by this project were previously programmed as part of NP013820 (Nansemond Advanced Nutrient Reduction Improvements Project) and the scope of NP013820 will be edited accordingly. This project will be designed in parallel with NP013700 (Nansemond Treatment Plant Struvite Recovery Facility Equipment Upgrade) which provides pre-dewatering facilities needed to make beneficial use of the capacity enhancements provided under this project.



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**Funding Description:** The total cost for this project is estimated at \$10,500,000 based on a Class 4 cost estimate and a 20 percent contingency included in the requested appropriation. Through the use of HRSD's existing Professional Services Agreement for General Engineering Services, Hazen and Sawyer will provide Preliminary Engineering, Design, Bid, and Construction Phase Engineering Services for the project. Negotiations for Hazen and Sawyer to provide Preliminary Engineering is in progress. The Task Order for Preliminary Engineering will be <\$200k and will not require Commission action.

**Schedule:**

PER	December 2020
Design	March 2021
Bid	September 2021
Construction	November 2021
Project Completion	December 2022

**Attachment:** None

**Public Comment:** None



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11. **Virginia Initiative Plant Administration Building Renovation  
Initial Appropriation**

**Action:** Appropriate total project funding in the amount of \$2,162,200.

**Moved:** Vishnu Lakdawala

**Seconded:** Elizabeth Taraski

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**CIP Project: VP018800**

**Project Description:** This project will renovate the existing administration areas constructed in 1974 and upgraded in 1990 at the Virginia Initiative Plant. The project will include additional administration offices, lunchroom, conference room, bathrooms and unisex bathrooms for Solids Treatment and Solids Handling.

**Funding Description:** The total project cost estimate of \$2,162,200 includes approximately \$206,000 in design phase services, approximately \$1,656,200 in construction phase costs, and \$300,000 of project contingency and is based on a Class 5 CIP-prioritization level cost estimate prepared by HRSD. Preliminary engineering services will be completed by Guernsey Tingle Architects, P.C. under the Architectural/Mechanical/Electrical Services annual services contract.

<b>Schedule:</b>	PER	December 2020
	Design	March 2021
	Bid	July 2021
	Construction	September 2021
	Project Completion	June 2022

**Attachment:** None

**Public Comment:** None



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12. **Nassawadox Treatment Plant  
Ownership Transfer Agreement with Shore Health Services, Inc.**

**Action:** Approve the terms and conditions of the Ownership Transfer [Agreement](#) with Shore Health Services, Inc. dba Riverside Shore Memorial Hospital (Riverside) and authorize the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary.

**Moved:** Michael Glenn

**Seconded:** Stephen Rodriguez

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Background:** On October 2, 2020, the Northampton County Circuit Court and the Accomack County Circuit Court ordered the boundaries of the District be enlarged to include both counties and all the towns therein.

In accordance with policy, HRSD will only assume responsibility for existing wastewater systems when approached by the system owner and when a transfer of ownership and/or operations agreement can be agreed upon and executed by both parties. The Nassawadox Treatment Plant was constructed as part of the Shore Memorial Hospital in Nassawadox. Riverside Health System has since assumed ownership of the hospital and related facilities. Riverside built a new hospital in Onley, Virginia and the former Shore Memorial is no longer in operation. The Nassawadox Treatment Plant continues to serve properties within the town of Nassawadox and is owned and operated by Riverside Health Systems.

Riverside is interested in transferring ownership and operating responsibilities for this wastewater treatment plant to HRSD. As the regional wastewater agency, HRSD has an interest in owning this treatment plant to support existing uses in Nassawadox and any future needs in that area of Northampton County.

HRSD facilitated a study of wastewater systems in northern Northampton and southern Accomack Counties in 2018. That study recommended closing the Nassawadox Treatment Plant and piping the flow to Onancock for treatment. That project is scheduled to begin design in early 2021 with construction complete in early 2023. The agreement with Riverside as drafted, transfers ownership to HRSD as soon as practicable but requires Riverside to continue to operate until June 2023 or when the pipeline is complete.



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Riverside will convey the plant and required property at no cost as well as continue to be responsible for all routine operations and maintenance. Maintenance and repairs in excess of \$2,500 will be borne by HRSD while Riverside operates the facility. The property transfer will occur after the subdivision plat is approved by Northampton County and appropriate deed and transfer agreements are executed.

**Attachment:** [#4](#)      [Amendment executed 6/26/2023](#)

**Public Comment:** None



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13. **Town of Onancock Wastewater Treatment Services Agreement**

**Action:** Approve the terms and conditions of the Wastewater Treatment Services [Agreement](#) between HRSD and the Town of Onancock and authorize the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary.

**Moved:** Vishnu Lakdawala

**Seconded:** Willie Levenston

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Background:** On October 2, 2020, the Northampton County Circuit Court and the Accomack County Circuit Court ordered the boundaries of the District be enlarged to include both counties and all the towns therein.

In accordance with policy, HRSD will only assume responsibility for existing wastewater systems when approached by the system owner and when a transfer of ownership and/or operations agreement can be executed. The Town of Onancock has expressed interest in transferring ownership and operations of their wastewater system to HRSD. Due to the complexities of having to survey, develop plats, and transfer ownership of multiple properties and easements, the actual transfer of ownership could take several months to more than one year. Both parties will work to minimize that time.

HRSD facilitated a study of wastewater systems in northern Northampton and southern Accomack Counties in 2018. That study recommended closing the Nassawadox Treatment Plant and piping the flow to Onancock for treatment. That project is scheduled to begin design in early 2021 with construction complete in early 2023. Should the transfer of ownership and operation not be complete at that point, an agreement is necessary to ensure HRSD has a viable treatment option for any flow conveyed by the pipeline.

**Attachment:** [#5](#)

**Public Comment:** None



COMMISSION MEETING MINUTES  
November 24, 2020

14. **Lamberts Point – 4301 Powhatan Avenue, Norfolk, VA  
Exercise of Option to Purchase Real Property Agreement  
Resolution**

**Actions:**

- a. **Approve the [Resolution](#) to exercise the option to purchase real property Lambert’s Point – 4301 Powhatan Avenue, Norfolk, Virginia.**
- b. **Appropriate funding in the amount of \$16,000,000 to complete the purchase in accordance with the terms of the agreement.**

**Moved:** Maurice Lynch

**Seconded:** Vishnu Lakdawala

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Background:** At the March 2018 meeting, the Commission approved an [agreement](#) with the City of Norfolk providing HRSD the option to purchase property owned by the City of Norfolk adjacent to the Virginia Initiative Plant (VIP) in Norfolk. The land will support construction of SWIFT facilities to treat the combined flows from VIP and the Army Base Treatment Plant.

Under the terms of the agreement HRSD cannot exercise the option to purchase any earlier than January 1, 2023 without written agreement from the City of Norfolk. Earlier this year, at our request, we received that agreement in the form of an amendment to the original option. Staff believes early execution would be beneficial for the following reasons:

- Gets this done – no worries about changes in political leadership in the future – players are still in place that made the deal at the staff level
- We have available cash now and CIP spend continues to get larger in the coming years
- Minimizes the inflationary factor – our payment obligation is \$15M + CPI-U inflation between April 12, 2018 and date of closing.
- Once closed and property is HRSD’s, we can get subdivision plat final approval – we have a preliminary approval now.
- Once closed we can work with golf course operator for more access for environmental study work.
- Provides City of Norfolk funds they could use during this economic crisis

Dates in this agreement:

- Golf stays open until December 31, 2022 (unless we make a deal with operator to close earlier)
- Closing must occur NLT May 31, 2021

**Attachment:** [#6](#)

**Public Comment:** None



COMMISSION MEETING MINUTES  
November 24, 2020

15. **Exemption from Mandated Utility Disconnect Moratorium Resolution**

**Action:** Approve the [resolution](#) verifying and approving arrearages are in excess of one percent of annual operating revenues.

**Moved:** Stephen Rodriguez

**Seconded:** Willie Levenston

**Roll call vote:**

**Ayes:** 7

**Nays:** 0

**Background:** The Commonwealth's budget included language requiring all utilities to offer payment plans to all customers as well as prohibiting utilities from disconnecting utility service for non-payment during the COVID 19 declared state of emergency. The budget language provides relief from the moratorium if account arrearages are in excess of one percent of annual revenues if:

- (i) the utility provides a written analysis stating such facts to demonstrate the exceedance to staff of the governing body,*
- (ii) the utility contemporaneously makes available for public inspection associated workpapers verifying such facts to staff of the governing body, and*
- (iii) the governing body verifies the exceedance, provides public notice, takes public comment on, and votes to approve that the exceedance is accurate in an open public meeting.*

Utilities across the Commonwealth and throughout the nation are struggling with non-payment during the COVID pandemic. HRSD has a long history of making reasonable accommodations to our customers struggling to pay their bills. Unfortunately, many customers are letting their balances grow. As of October 31, 2020, HRSD [aging receivables](#) had grown to nearly \$16 million. Staff is concerned about customers letting their balances grow, perhaps under the misconception that balances will be forgiven. We have no authority to forgive balances for services received and as such many customers will be challenged to ever recover if they do not begin a payment plan soon. The ability to disconnect service would provide the needed leverage to get customers to respond to our notices of overdue balances and hopefully get them under manageable payment plans. We will not shut off service to any customer that is making a reasonable effort to pay off overdue balances.

**Discussion Summary:** The Commission discussed the process and timeline for customers impacted by COVID-19 to apply for and obtain Cares Act money. Staff will assist customers in obtaining this money to apply to their balance. Staff will ask the Hampton Roads Planning District Commission (HRPDC) to widely distribute the information on how to apply for this funding.

**Attachment:** [#7](#)

**Public Comment:** None





COMMISSION MEETING MINUTES  
November 24, 2020

16. **COVID-19 Wastewater Surveillance Study Update**

**Action:** No action is required.

**Brief:** Staff presented the latest [data and status](#) of the COVID-19 surveillance work including monitoring of HRSD facilities through November 17, general observations from monitoring at HRSD facilities; number of COVID-19 cases in Hampton Roads; normalized viral load at HRSD facilities; a spatial look at the last four weeks; and regional viral load.

Moving forward, staff will continue weekly monitoring at the nine major treatment plants and continue to provide data to the Virginia Health Department (VDH) and the Centers for Disease Control (CDC). Staff is looking forward to presenting an overview of the wastewater epidemiology surveillance work to the Virginia State Board of Health on December 3 with the Hampton Roads Wastewater Surveillance workgroup. Partnering with Virginia Department of Corrections to study wastewater load and infections in prisons continues.

**Discussion Summary:** Staff is now looking at a variety of metrics including clinical, hospitalizations, and deaths. HRSD's data runs about one week ahead and coincides with the clinical data. We are not engaged in campus monitoring for schools.

**Attachment:** [#8](#)

**Public Comment:** None



COMMISSION MEETING MINUTES  
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17. **Unfinished Business – None**

18. **New Business – None**

19. **Commissioner Comments – None**

20. **Public Comments Not Related To Agenda**

Ms. Cascio read the following comments from Mike & Carole Joslin, owners of Nansemond River Seafood:

*"Hello, we'd like to begin by thanking you for the opportunity to share our comments to the Commission concerning our situation.*

*Our names are Mike and Carole Joslin. We've owned and operated Nansemond River Seafood for 28 years. Our fishing business has always been conducted in the Nansemond River and its tributaries. We've also kept our boat and equipment at Brady's Marina (located on the Nansemond River) for 28 years as well. We are one, of only two, fishing businesses in the Nansemond River; this has been the case for as long as we can remember.*

*On September 18, 2020, the stand-by pump failed at Shingle Creek resulting in millions of gallons of raw sewage spilling into the Nansemond River. The Shingle Creek pump(s) have had a history of being unable to handle the capacity of sewage associated with heavy rains. We recently learned there is a project underway in Shingle Creek to rehabilitate the aging sanitary sewer pipeline. Hopefully this will help to prevent spills in the future. HRSD successfully manages hundreds of miles of piping throughout Hampton Roads and takes ownership when the sewage systems are functioning properly; we sincerely ask you take the same ownership when they have malfunctioned.*

*Soon after the September 18th spill, Virginia Department of Health issued a closure of shellfish in the Nansemond River. This issuance came with strong media coverage. The media described the spill as "the worst in recent history". Wavy 10 stated, "The water is black and there are nasty smells coming from it." An article in the newspaper said, "Refrain from all recreation and fishing in the Nansemond". Immediately, our sales began to drop. Our long-standing customers cancelled their orders and purchased their seafood elsewhere. Our customers were simply afraid to take the risks. The public opinion was the river had been contaminated with raw sewage and consumption of any seafood was dangerous. It was not the "amount" of raw sewage that spilled, but the "presence" of raw sewage. Whether there is one drop of raw sewage in a bottle of water, or a spoonful, it would be considered contaminated and would not be consumed.*

*Commercial Watermen fall under the Department of Agriculture. We have a harvest season much like a farmer. Our harvest season is about 7 months depending on many factors. The*



COMMISSION MEETING MINUTES  
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*spill cost us about 2 1/2 months of business. This is 35% of our yearly income. In our business, every sale is critical, and every customer is valuable. This year, it's extremely critical we have a "complete" season due to a terrible accident with Mike. On August 10th, 2020, while unloading seafood, Mike fell and broke his neck. Life changed in an instant. We quickly found ourselves in an ambulance being transported to the trauma unit at Norfolk General Hospital. After the initial shock of what had happened and a lot of prayer; Mike begged the family to continue the business. Our adult sons were able to adjust their work schedules due to COVID and picked up the business where Mike left it. They had learned the business as young kids and knew exactly what to do. Miraculously, the business was thriving and then the spill occurred. Thankfully, the prognosis for Mike is hopeful, but it's going to take a long time.*

*The spill on September 18th changed things for us (yet again), but this time the business was unable to pick up where it left off. Our business hasn't recovered to pre-spill conditions. We're a long way from that. The sewage spill hurt our business, hurt our family (because of a 35% loss of income), and hurt our future.*

*We've consulted several attorneys in regards to our situation, but before we go that route we sincerely ask you to please consider some compensation for our loss. (I've forwarded copies to Mr. Henifin of our financial records and estimated losses.)*

*In closing, thank you again for an opportunity to share our situation with you. Thank you, Mr. Henifin for your responses, Mrs. Rice and Ms. Hermans, thank you for the information I requested, and mostly Ms. Cascio, for your prompt emails responses, your understanding, and your steady professionalism over the last 2 months. Sincerely, Mike and Carole Joslin."*

The Commission directed Mr. Henifin to review the claim and provide a report.

21. **Informational Items**

**Action:** No action required.

**Brief:** The items listed below were presented for information.

- a. [Management Reports](#)
- b. [Strategic Planning Metrics Summary](#)
- c. [Effluent Summary](#)
- d. [Air Summary](#)

**Attachment:** #9

**Public Comment:** None



COMMISSION MEETING MINUTES  
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22. **Closed Meeting**

**Actions:** In accordance with Section 2.2-3712A of the Code of Virginia, a motion is needed to go into a closed meeting to consider Investment of Public Funds as provided for in Section 2.2-3711A:

**Purpose** : Briefing  
**Specific Exemptions** : (Va. Code §2.2-3711.A6)

**Moved:** Vishnu Lakdawala

**Seconded:** Willie Levenston

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**Brief:** Discussion or consideration of the investment of public funds where competition or bargaining is involved, where, if made public initially, the financial interest of the governmental unit would be adversely affected.

23. **Reconvened Meeting**

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

**Roll call vote:** **Ayes:** 7 **Nays:** 0

**Attachment:** None

**Public Comment:** None

**Next Commission Meeting Date:** December 15, 2020

**Meeting Adjourned:** 11:22 a.m.

SUBMITTED:

*Jennifer L. Cascio*

\_\_\_\_\_  
Jennifer L. Cascio  
Secretary

APPROVED:

*Frederick N. Elofson*

\_\_\_\_\_  
Frederick N. Elofson, CPA  
Chair

HRSD Commission Meeting Minutes

November 24, 2020

Attachment 1

Agenda item 1. Awards and Recognition - NACWA Peak Performance Awards for Calendar Year 2019

# 2020 Peak Performance Awards



# 2020 Peak Performance Awards

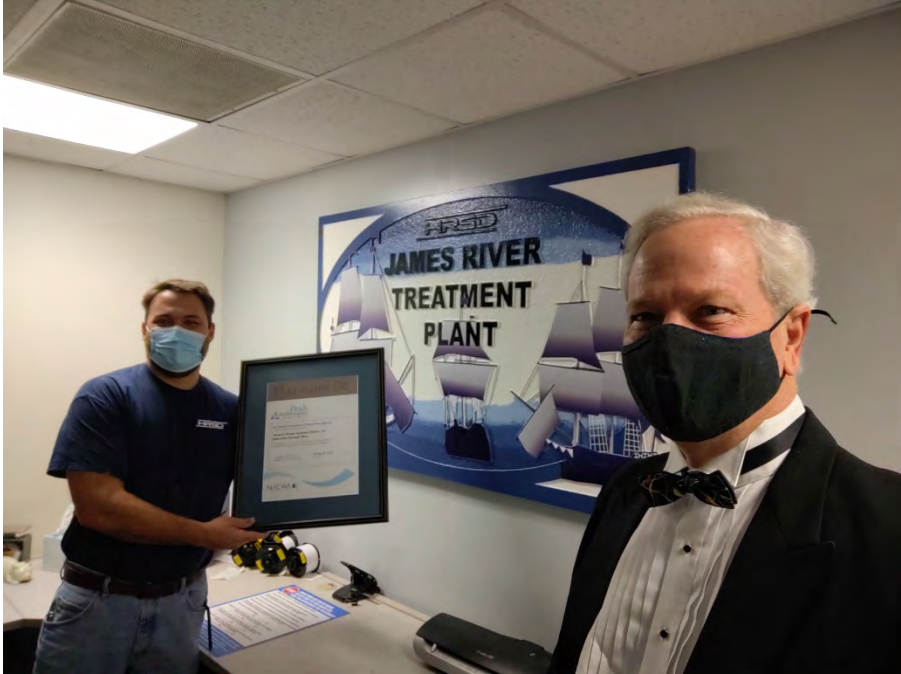


# 2020 Peak Performance Awards





# 2020 Peak Performance Awards



# 2020 Peak Performance Awards



HRSD Commission Meeting Minutes

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Attachment 2

b. **Contract Awards**

1. [King William Treatment Plant Improvements Phase I](#) \$1,100,000

c. **Task Orders**

1. [Atlantic Service Area Automated Diversion Facilities Phase I](#) \$956,000

2. [Bethel-Poquoson Interceptor Force Main Replacement Phase II](#) \$220,609

3. [Bloxoms Corner Force Main Replacement](#) \$321,500

4. [James River Recharge Wells](#) \$981,177

d. **Sole Source**

1. [Aerobic/Anaerobic Pulse Flow Respirometer System](#)

2. [Schwing Bioset Biosolids Hydraulic Pump Replacement Parts](#)

e. **HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award**

1. [Microsoft 365 Migration](#) \$212,784

2. [Water Quality Services Building Phase II](#) \$633,165

## CONSENT AGENDA ITEM 2.b.1. – November 24, 2020

**Subject:** King William Treatment Plant Improvements Phase I  
Contract Award (>\$200,000)

**Recommended Actions:** Award a contract to Shaw Construction Corporation in the amount of \$1,100,000.

**CIP Project: MP012000**

Budget	\$3,948,076
Previous Expenditures and Encumbrances	(\$1,066,795)
Available Balance	\$2,881,281

**Type of Procurement:** Competitive Bid

Bidder	Bid Amount
Shaw Construction Corporation	\$1,100,000
American Contracting & Environmental Services, Inc.	\$1,177,000
Garney Companies, Inc.	\$1,319,900

**Engineer Estimate:** \$1,533,612

**Contract Description:** In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. Three bids were received and evaluated based upon the requirements in the invitation for bid. Shaw Construction Corporation is the apparent low bidder with a bid amount of \$1,100,000. The engineer, Jacobs, has reviewed the documentation provided by the low bidder and recommends award to Shaw Construction Corporation.

**Project Description:** This project allows for improvements to the King William Treatment Plant in order to continue to provide reliable treatment and capacity per regulatory requirements. The construction contract will provide the following upgrades to the plant:

1. Pumps and piping dedicated to each treatment train providing equalized influent flow.
2. A dedicated membrane cleaning tank to include automated remote backwash cleaning.
3. Replacement of the Ultraviolet Disinfection system.
4. A new Programmable Logic Controller (PLC) for process control.

**Analysis of Cost:** The Engineer's Estimate was prepared in accordance with the guidelines of the Association for the Advancement of Cost Engineering (AACE) for a Class I cost estimate stated accuracy range of +15% to -10%. The bids came in lower than the Engineer's Estimate, with a range of -14% to -28%. The difference is attributed to strong competition for available work due to COVID-19 impacts to the economy which has resulted in an aggressive bidding environment.

**Schedule:** Construction January 2021  
Project Completion October 2021

## CONSENT AGENDA ITEM 2.c.1. – November 24, 2020

**Subject:** Atlantic Service Area Automated Diversion Facilities Phase I  
Task Order (>\$200,000)

**Recommended Action:** Approve task orders with Bridgeman Civil, Inc. in an amount totaling \$956,000.

**CIP Project: CE011850**

Budget	\$ 3,250,000
Previous Expenditures and Encumbrances	(\$ 670,188)
Available Balance	\$ 2,579,812

<b>Contract Status:</b>	<b>Amount</b>
Original Contract with Bridgeman Civil	\$0
Total Value of Previous Task Orders	*\$2,999,141
Requested Task Order – Location #1	\$461,000
Requested Task Order – Location #2	\$495,000
Total Value of All Task Orders	\$3,955,141
Revised Contract Value	\$3,955,141

\*Including emergency job orders totaling \$1,189,454.

**Project Description:** This project involves installing a new control valve at Lynn Shores Drive and adding control to an existing valve near North Hessian Road in Virginia Beach to provide greater operational flexibility and system diversion capabilities during wet weather events when flow from the Chesapeake-Elizabeth Treatment Plant is diverted. The project will include near real-time communication and control logic between multiple remote and pump station sites. The new controlled facilities will adapt to variable system conditions in order to maximize capacity of the existing interceptor system infrastructure.

**Task Order Description:** The task order for Location #1 will provide for the installation of a 24-in valve, concrete vault, access drive, associated power conduits and concrete equipment pads. The task order for Location #2 will provide for the installation of a concrete vault around the existing 36-in valve, access drive, associated power conduits and concrete equipment pads.

**Analysis of Cost:** The cost for this task order is based on the unit prices and labor rates in the Sewer Repair On-Call Contract with Bridgeman Civil.

<b>Schedule:</b>	Locality Review / Permitting	November 2020
	Construction	January 2021
	Completion	July 2021

## CONSENT AGENDA ITEM 2.c.2. – November 24, 2020

**Subject:** Bethel-Poquoson Interceptor Force Main Replacement Phase II  
Task Order (>\$200,000)

**Recommended Action:** Approve a task order with Rummel, Klepper & Kahl, LLP (RK&K) in the amount of \$220,609.

**CIP Project: YR014300**

Budget	\$3,154,000
Previous Expenditures and Encumbrances	(\$144,695)
Available Balance	\$3,009,305

<b>Contract Status:</b>	<b>Amount</b>
Original Contract with RK&K	\$144,695
Total Value of Previous Task Orders	\$0
Requested Task Order	\$220,609
Total Value of All Task Orders	\$220,609
Revised Contract Value	\$365,304
Engineering Services as % of Construction	11.7%

**Project Description:** This project will replace approximately 3,700 linear feet of 20-inch prestressed concrete cylinder pipe (PCCP) along Wythe Creek Road from north of Huntlandia Way to Wythe Creek located in the City of Poquoson.

**Task Order Description:** This task order will provide design and bid phase services.

**Analysis of Cost:** The cost for this task order is based on a negotiated number of consulting hours and hourly rates between RK&K and HRSD. The task order consists of \$220,608.80 for the design and pre-construction phase services. The current construction cost estimate for this project is \$3,131,330 and the current ratio of Engineering Service to Construction cost is approximately 11.7% which is comparable to other similar projects.

<b>Schedule:</b>	Design	November 2020
	Bid	May 2021
	Construction	August 2021
	Project Completion	August 2022

## CONSENT AGENDA ITEM 2.c.3. – November 24, 2020

**Subject:** Bloxoms Corner Force Main Replacement  
Task Order (>\$200,000)

**Recommended Action:** Approve a task order with Kimley Horn and Associates, Inc. in the amount of \$321,500.

**CIP Project: BH015900**

Budget	\$3,495,808
Previous Expenditures and Encumbrances	(\$82,326)
Available Balance	\$3,413,482

<b>Contract Status:</b>	<b>Amount</b>
Original Contract with Kimley Horn and Associates	\$81,500
Total Value of Previous Task Orders	\$0
Requested Task Order	\$321,500
Total Value of All Task Orders	\$321,500
Revised Contract Value	\$403,000
Engineering Services as % of Construction	10.7%

**Project Description:** This project includes the replacement of approximately 6,100 linear feet of 8-inch cast iron force main with 12-inch force main located in the City of Hampton. This project is included in the Rehabilitation Action Plan Phase II with a May 2025 regulatory completion date due to past force main failure which indicates a material risk of failure.

**Task Order Description:** This task order will provide design and bid phase services.

**Analysis of Cost:** The cost for this task order is based on a negotiated number of consulting hours and hourly rates with Kimley Horn and Associates. The Engineering Services as a percentage of construction cost is comparable to other pipeline replacement projects of similar size and complexity and is considered to be reasonable for this effort.

<b>Schedule:</b>	Design	December 2020
	Bid	January 2022
	Construction	April 2022
	Project Completion	June 2023

## CONSENT AGENDA ITEM 2.c.4. – November 24, 2020

**Subject:** James River Recharge Wells  
Task Order (>\$200,000)

**Recommended Action:** Approve a task order with Earth Data Incorporated in the amount of \$981,177.

**CIP Project: GN016361**

Budget	\$32,445,599
Previous Expenditures and Encumbrances	(\$157,418)
Available Balance	\$32,288,181

<b>Contract Status:</b>	<b>Amount</b>
Original Contract with Earth Data Incorporated	\$157,418
Total Value of Previous Task Orders	\$0
Requested Task Order	\$981,177
Total Value of All Task Orders	\$981,177
Revised Contract Value	\$1,138,595
Engineering Services as % of Construction	3.4%

**Project Description:** This project will provide for the construction of recharge wells and monitoring wells; services for the development, logging, testing, and conditioning of wells associated with SWIFT at the James River Treatment Plant.

**Task Order Description:** This task order will provide design services including hydrogeologists and civil engineering services to provide bid ready documents for procurement of recharge and monitoring well drillers for the James River Treatment Plant facilities.

**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 design and hydrogeological services. The not-to-exceed lump sum fee plus proposed additional services is 3.4% of the estimated construction cost. This ratio for design services to construction cost is similar to other large capital projects. This task order will be issued as an amendment to the Professional Services Agreement with Earth Data Incorporated for the SWIFT Recharge and Monitoring Well Services Program. The rates and proposed sub-consultant fees are consistent with the rate structure within the Agreement, as approved for FY2021.

<b>Schedule:</b>	Design	November 2020
	Bid	March 2021
	Construction	October 2021
	Project Completion	July 2025



CONSENT AGENDA ITEM 2.d.1. – November 24, 2020

**Subject:** Aerobic/Anaerobic Pulse Flow Respirometer System  
Sole Source (>\$10,000)

**Recommended Action:** Approve the purchase of PF-8000 Aerobic/Anaerobic Pulse Flow Respirometer System by Respirometer Systems and Applications LLC for all of HRSD.

**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 PF-8000 Aerobic/Anaerobic Pulse Flow Respirometer System. The respirometer system is a static liquid/mobile gas/gas phase oxygen measurement type for use in biological treatment applications.

HRSD currently uses two of the PF-8000 Aerobic/Anaerobic Pulse Flow Respirometer Systems purchased in January 2011 via sole source award to Respirometer Systems LLC which pre-dates the 2015 Commission approval guidelines. Market research of similar systems supports that the PF-8000 is the only instrument available that can allow for aerobic, anaerobic and gas production in one unit whereas other Suppliers could only provide these functions through separate instrument purchases.

CONSENT AGENDA ITEM 2.d.2. – November 24, 2020

**Subject:** Schwing Bioset Biosolids Hydraulic Pump Replacement Parts  
Sole Source (>\$10,000)

**Recommended Action:** Approve the use of Schwing Bioset Biosolids Hydraulic Pump Replacement Parts by Schwing Bioset Inc. at the Army Base Treatment Plant.

**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 replacement parts for the Schwing Bioset hydraulic pump including suction housings, poppets and screw feeder. These parts are unique to the Army Base Plant and are custom fit for the foreign biosolids receiving operations. Army Base Treatment Plant requires these parts for a short period time before the shutdown of the solids handling process in the near future.

The existing pump and parts were originally purchased in 2011 through a competitive solicitation. Installation of parts and general preventive maintenance is performed by HRSD personnel.

CONSENT AGENDA ITEM 2.e.1. – November 24, 2020

**Subject:** Microsoft 365 Migration  
HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award  
(>\$200,000)

**Recommended Actions:**

- a. Approve the use of the City of Virginia Beach Contract ITB-15-0012k for purchase of consulting services for the migration to Microsoft 365 from Marathon Consulting.
- b. Award a contract to Marathon Consulting in the amount of \$212,784.

**HRSD Estimate:** \$212,784

**Contract Description:** HRSD is conducting a district wide upgrade and migration of Microsoft 365 online. Marathon Consulting will migrate the current Microsoft Office applications (Excel, SharePoint, Exchange, Word) to Microsoft Office 365 which is a cloud-based solution that allows users to access their documents at anytime from anywhere. Built-in sharing and collaboration features of Office 365 such as Teams will provide HRSD a modern work environment for those working on site and remotely. Marathon Consulting is an approved Microsoft partner with the capabilities to complete the project.

**Analysis of Cost:** Marathon Consulting has intimate knowledge of HRSD processes and programs through support of SharePoint. HRSD will be able to complete the Microsoft migration quickly by utilizing the cooperative contract through the City of Virginia Beach, which is critical before certain platforms run out of support.

## CONSENT AGENDA ITEM 2.e.2. – November 24, 2020

**Subject:** Water Quality Services Building Phase II  
 HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award  
 (>\$200,000)

**Recommended Actions:**

- a. Approve the use of SourceWell Furniture Contract #121919-STI for purchase of office furniture for the Water Quality Services Building from Steelcase.
- b. Award a contract to Creative Office Environments of Richmond LLC in the amount of \$633,165.

**HRSD Estimate: \$633,165**

**CIP Project: AD012200**

Budget	\$19,500,312
Previous Expenditures and Encumbrances	(\$17,714,812)
Available Balance	<u>\$1,785,500</u>

**Contract Description:** The project includes demolition of the existing warehouse and construction of a new building, on the same site, to host the Technical Services Division and Pretreatment & Pollution Prevention Division. This purchase is to furnish the new Water Quality Services Building with office furniture, chairs, tables, bookcases, partitions, etc.

**Analysis of Cost:** By utilizing the SourceWell cooperative contract, HRSD is receiving on average a 60 percent cost savings from the manufacturer retail sales price.

HRSD Commission Meeting Minutes

November 24, 2020

Attachment 3

AGENDA ITEM 3. – November 24, 2020

\* [Residential Customer Survey - detailed](#)

\* [Residential Customer Survey - Highlights](#)



**Hampton Roads Sanitation District  
Customer Satisfaction Study  
Wave 2**

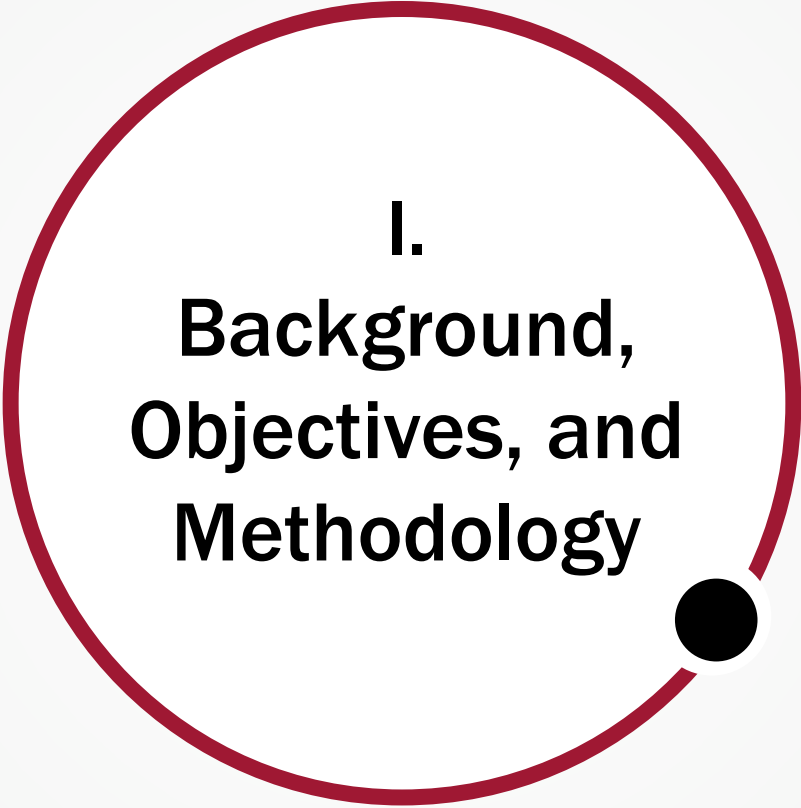
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Detailed Report  
October 19, 2020

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- I. Background, Objectives, and Methodology
- II. Executive Summary Highlights
- III. Respondent Profile
- IV. Key Findings



**I.  
Background,  
Objectives, and  
Methodology**



# Background

The Hampton Roads Sanitation District was created in 1940 to protect public health and the waters of Hampton Roads by treating wastewater effectively. HRSD's service area includes 19 cities and counties, covering over 3,000 square miles, and 1.7 million citizens.

SIR was engaged to survey residential customers as part of a biannual tracking study of awareness, satisfaction, and communications preferences. Prior studies were conducted by another research company in 2009, 2011, 2013, and 2015, SIR conducted its Benchmark Wave of this study in 2018.



**This document shares the results of Wave 2 of the survey, conducted June-August 2020.**

---

# Objectives

The overall goal of SIR's work is to monitor residential customer satisfaction via a tracking tool that provides rich insights and actionable findings. Specific objectives include:

- Measure residential customers' awareness of HRSD.
- Continue tracking overall customer satisfaction with HRSD.
- Assess customer satisfaction of specific topics, including:
  - Customer service
  - HRSD/HRUBS bills
  - Fees charged for sewage treatment
  - Payment options (including through the website)
- Measure residential customer satisfaction and use of the HRSD website.
- Gauge customer communication preferences.
- Explore perceptions of HRSD's role in environmental education, sustainability, and recycling wastewater.
- Collect relevant demographic information among respondents.
- Compare 2020 Wave 2 results to 2018 Benchmark data where possible.

---

# Methodology

## ONLINE SURVEY

- Conducted among HRSD residential customers ages 18 and older who play a role in the payment of utility bills
- Took 11 minutes, on average, to complete
- Fielded June 15 through August 11, 2018
- **n=2,784** responses collected
- Specific quotas were not established across the 19 different geographical areas, but SIR did attempt to collect responses from each area
- Incentivized by opportunity to earn a \$5 e-gift card from Starbucks

---

# Segmentation

- SIR analyzed the survey responses based on a wide range of variables to identify important differences among residential customers. Those included:
  - Geography/region
  - Respondent age/generation
  - Gender
  - Household income
  - HRSD vs. HRUBS customers
  - Knowledge score (based on True/False statements in Q42)
- In most cases, few significant differences appear; however, segments with large significant differences in responses are noted in this report.

# Survey geography

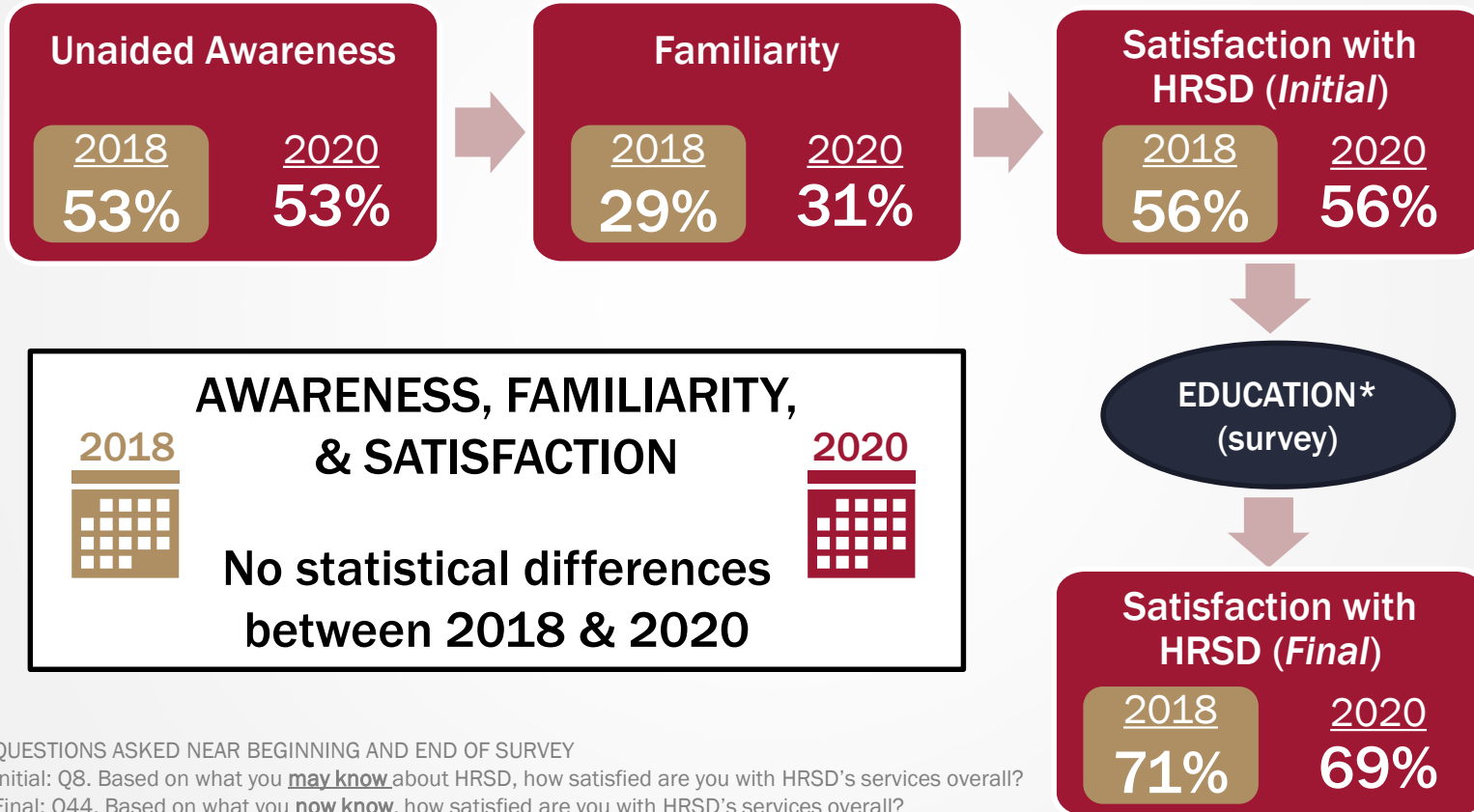


- Only residents residing in the 19 counties and cities were offered the opportunity to participate.
- Respondents were also screened to ensure they have a primary or shared role in utility bill payment.



## **II. Executive Summary**

# Overall ratings of HRSD



\*QUESTIONS ASKED NEAR BEGINNING AND END OF SURVEY

Initial: Q8. Based on what you may know about HRSD, how satisfied are you with HRSD's services overall?

Final: Q44. Based on what you now know, how satisfied are you with HRSD's services overall?

## HRSD Customer Care



**61%**

of respondents are satisfied  
with HRSD customer care

No statistically significant  
changes between  
2018 & 2020

### TOP ATTRIBUTES of HRSD customer care





## HRSD Website Bill Pay



**72%**  
receive bills via  
email or online  
(81% of Millennials)



**91%**  
pay their bills  
online

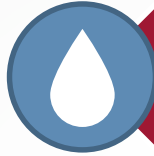


**84%**  
are satisfied with  
the payment  
process online

# SWIFT – Sustainable Water Initiative for Tomorrow



No statistically significant changes between 2018 & 2020



5% awareness of SWIFT



45% familiarity (of those aware)



37% interested in SWIFT



56% find projects like SWIFT important or very important



# III. Respondent Profile

# Respondent demographic information

DEMOGRAPHIC	GROUP	SAMPLE PROPORTION
GENDER	Male	39%
	Female	61%
GENERATION	Millennials (born 1983–1999)	34%
	Generation X (born 1965–1982)	36%
	Boomers (born 1946–1965)	24%
	Silent Generation (born prior to 1946)	6%
HOME OWNERSHIP	Own	87%
	Rent	12%
	Other	1%

# Respondent demographic information (cont'd)

DEMOGRAPHIC	GROUP	SAMPLE PROPORTION
HISPANIC ETHNICITY	Hispanic or Latino	96%
	Not Hispanic or Latino	4%
RACE	White	80%
	Black or African-American	13%
	Asian	3%
	American Indian or Alaska Native	1%
	Native Hawaiian or Pacific Islander	<1%
	Other	3%
ANNUAL HOUSEHOLD INCOME	Less than \$50,000	17%
	\$50,000--\$99,999	40%
	\$100,000-\$149,999	27%
	\$150,000+	17%



# Respondent tenure

NUMBER OF YEARS	HRSD BILLING RESPONDENTS (n = 1,546)	HRUBS BILLING RESPONDENTS (n = 1,013)
1 or less	12%	17%
2 to 5	19%	22%
6 to 10	16%	19%
11 to 20	26%	25%
21 or more	15.3	14.0
<b>AVERAGE YEARS AS A CUSTOMER</b>	12%	17%

# Respondent geography

PENINSULA GEOGRAPHY	SAMPLE PROPORTION
James City County	12%
City of Poquoson	8%
City of Newport News	8%
City of Hampton	5%
York County	4%
Gloucester County	3%
King William County	1%
City of Williamsburg	1%
Middlesex County	1%
Mathews County	0%
<b>Peninsula Total</b>	<b>44%</b>

SOUTHSIDE GEOGRAPHY	SAMPLE PROPORTION
City of Virginia Beach	20%
City of Chesapeake	10%
Isle of Wight County	9%
City of Norfolk	8%
City of Portsmouth	4%
City of Suffolk	4%
Surry County	<1%
<b>Southside Total</b>	<b>56%</b>

n = 2,768





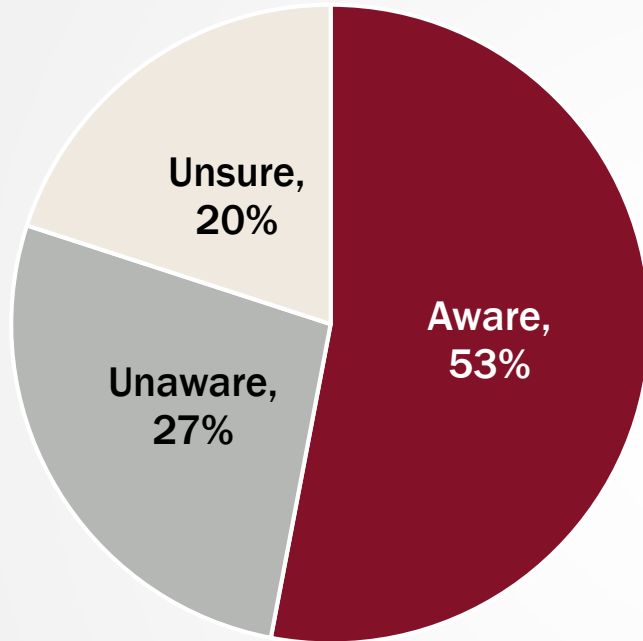
# IV. Key Findings



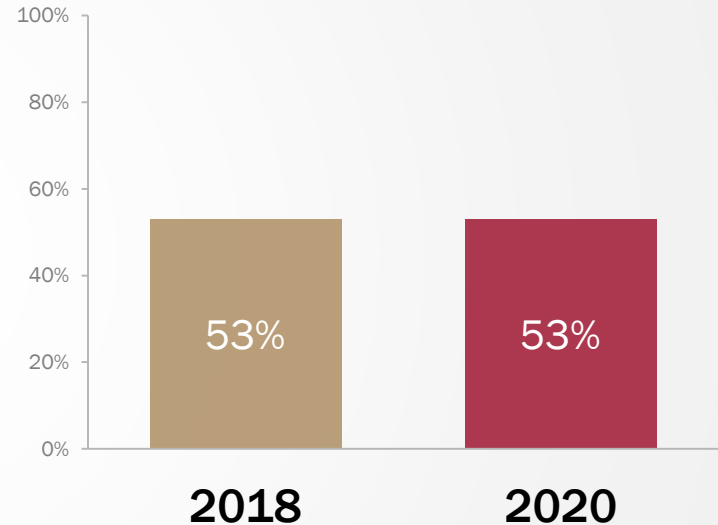
1

**Awareness, familiarity, satisfaction, and performance measures are all unchanged from 2018, but continue to vary across the service footprint.**

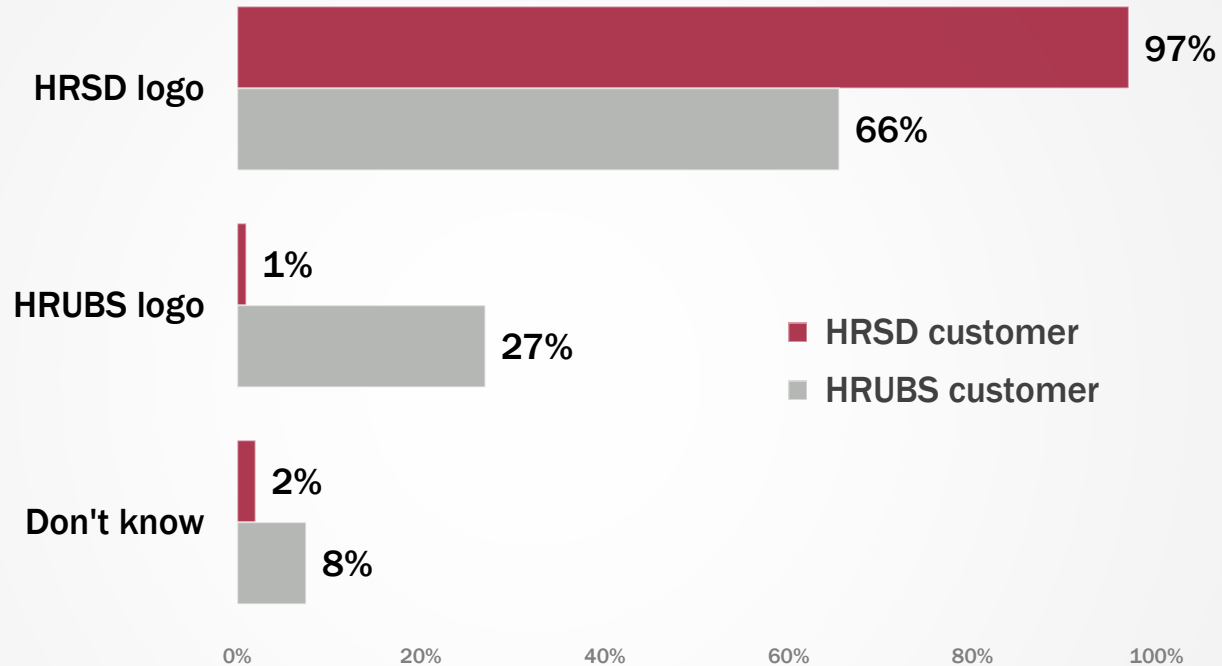
# **AWARENESS:** Just over half of customers know HRSD or HRUBS — no change from 2018



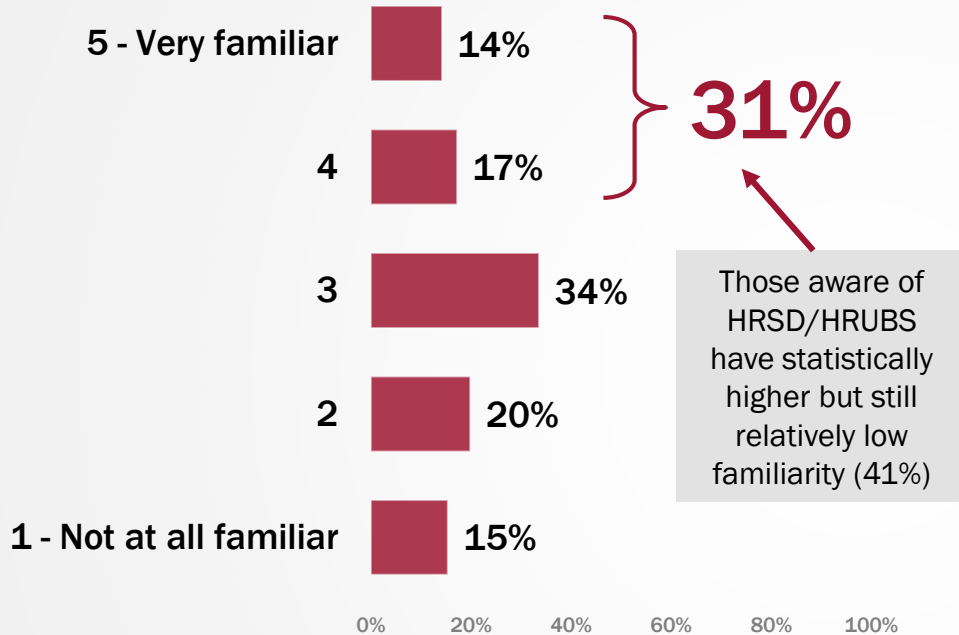
**Awareness is unchanged vs. 2018**



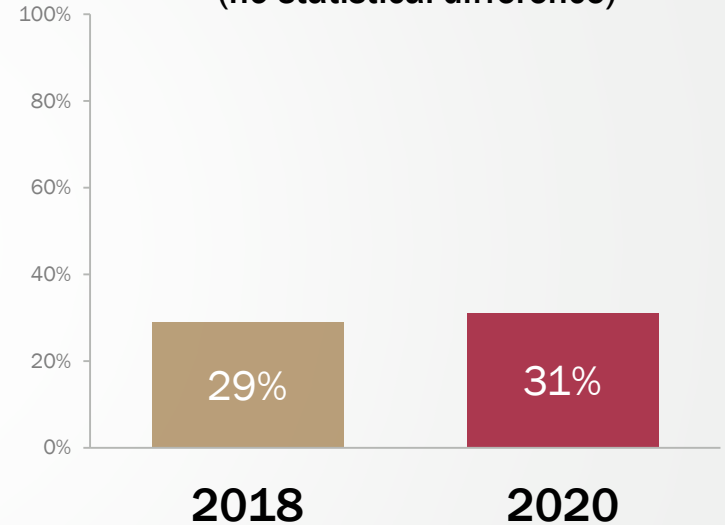
While nearly all HRSD customers correctly identify their corresponding logo, nearly two-thirds of HRUBS incorrectly identify as HRSD customers



# Despite survey respondents being involved in paying their utility bills, self-reported **FAMILIARITY** is low

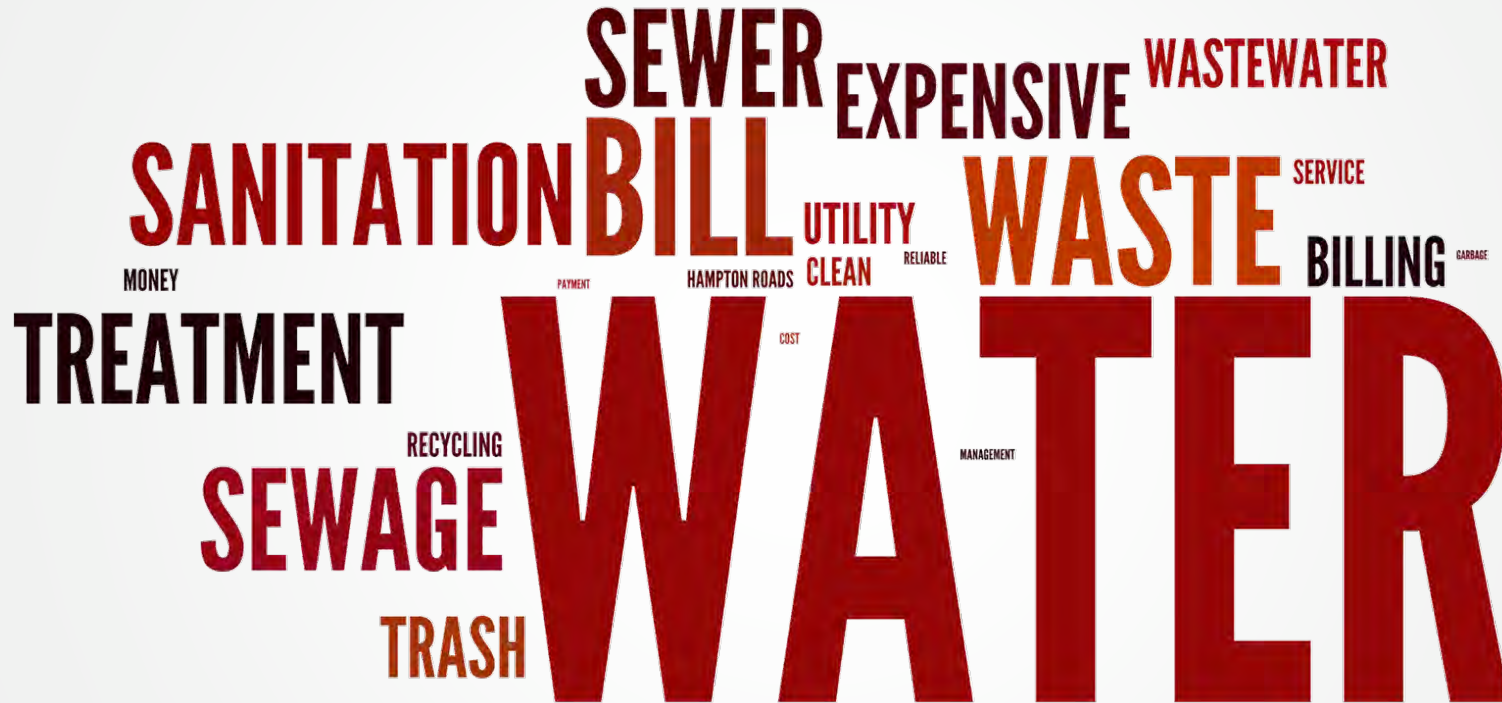


Familiarity is about the same vs. 2018 (no statistical difference)



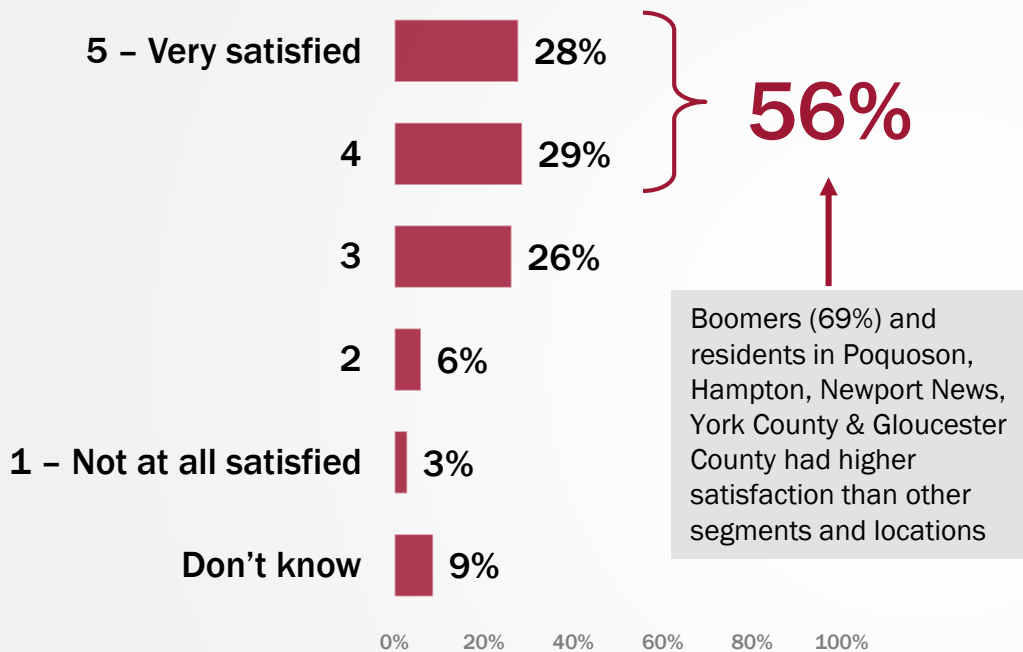
# Water dominates top of mind words related to HRSD

Trash and recycling, while less frequent, are also associated with HRSD

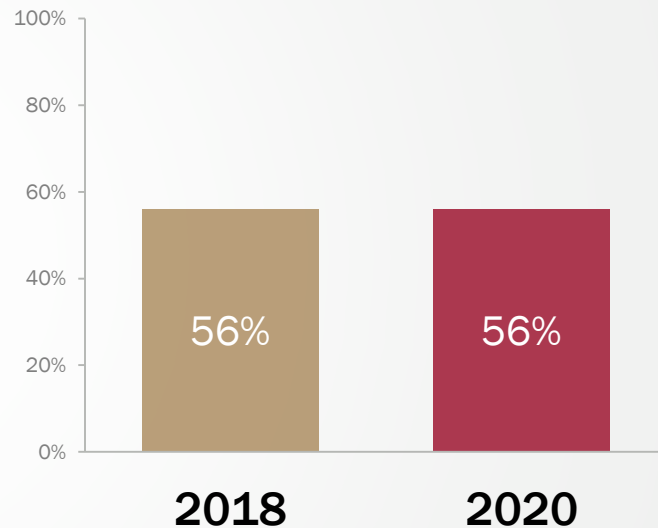




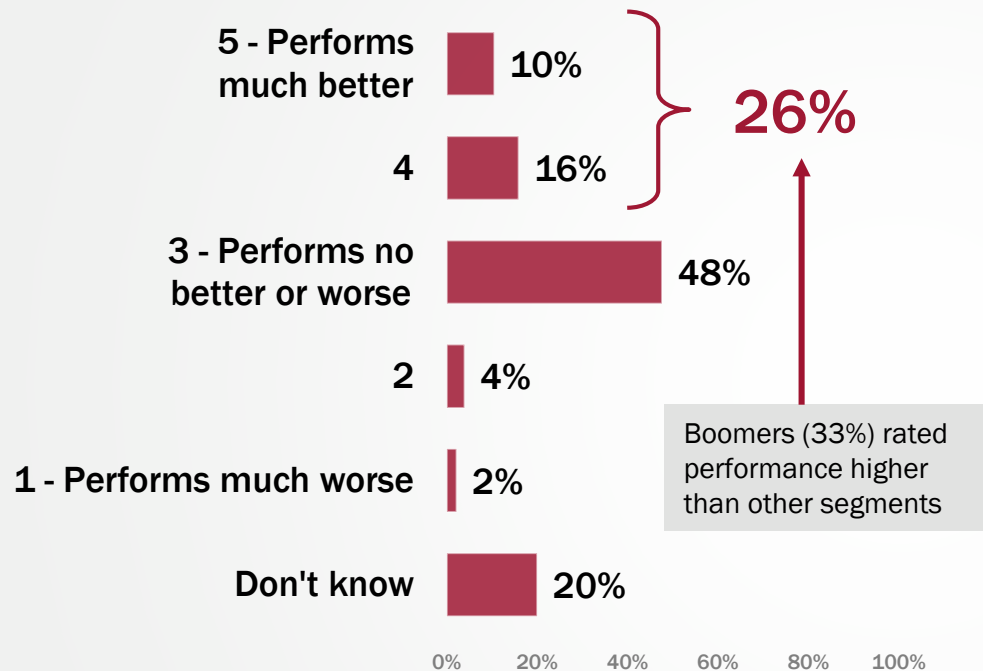
# Despite low familiarity, slightly more than half of customers report high levels of **SATISFACTION** with HRSD



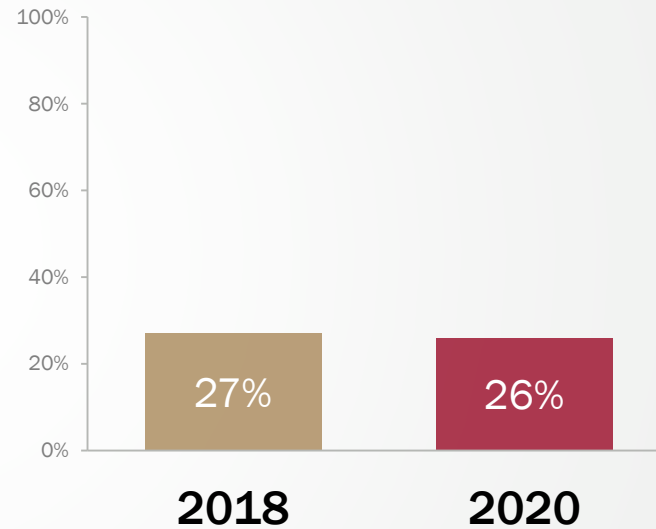
**SATISFACTION is unchanged vs. 2018**



# Over two-thirds of customers score HRSD as neutral or say “Don’t Know” when it comes to **PERFORMANCE**

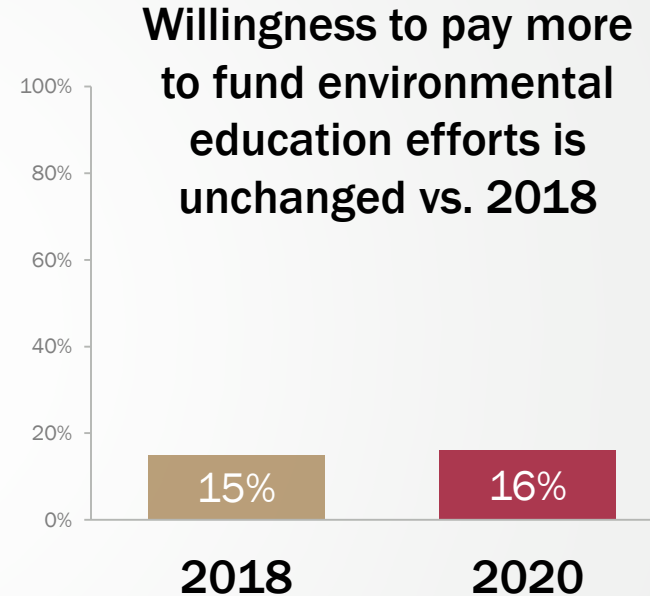
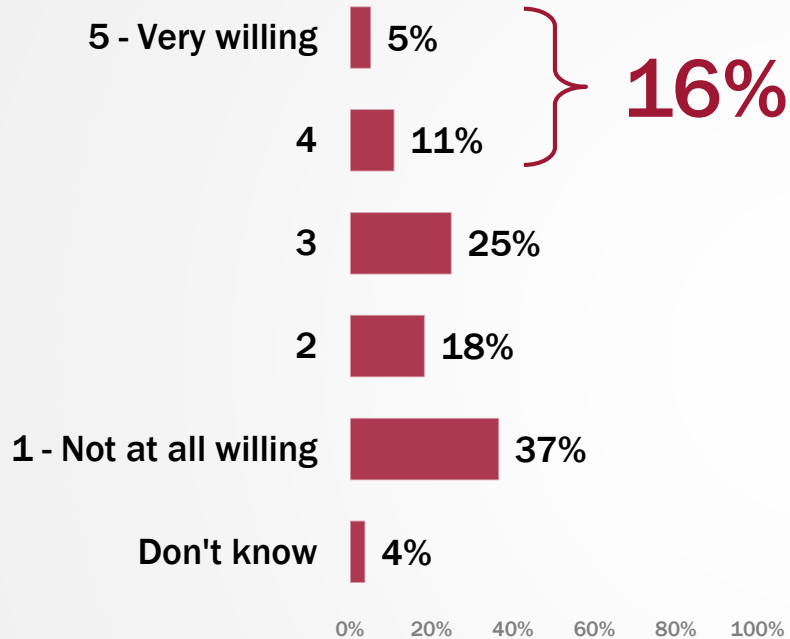


**PERFORMANCE is unchanged vs. 2018**





# Only 16% of customers are willing to pay more for any utility to fund ENVIRONMENTAL EDUCATION EFFORTS



# AWARENESS, SATISFACTION and PERFORMANCE is uneven across the service footprint

GEOGRAPHY	% AWARE	% 4, 5 - VERY SATISFIED	% 4, 5 - HRSD performs much better
Gloucester County	60%	61%	28%
Isle of Wight County	60%	44%	20%
York County	59%	63%	33%
City of Virginia Beach	56%	57%	27%
City of Poquoson	55%	73%	28%
City of Newport News	55%	62%	35%
James City County	55%	54%	22%
City of Williamsburg	54%	46%	15%
Middlesex County	53%	47%	21%
City of Portsmouth	52%	55%	30%
Surry County	50%	42%	25%
City of Norfolk	50%	55%	29%
City of Suffolk	47%	42%	24%
City of Hampton	47%	64%	30%
City of Chesapeake	46%	54%	22%
King William County	38%	55%	23%
Mathews County	33%	33%	11%

n = 2,768



# Older males tend to be more aware, have higher satisfaction, and feel HRSD performs better compared to other segments

ATTRIBUTE	LOCATION		GENDER		GENERATION			HH INCOME	
	Southside	Peninsula	Male	Female	Millennial	Gen X	Boomer+	<\$50K	\$50K+
Aided awareness	53%	54%	64%	48%	50%	52%	59%	39%	58%
Familiarity	31%	32%	38%	28%	30%	32%	35%	34%	32%
Satisfaction	53%	61%	59%	56%	56%	51%	67%	58%	59%
Performs better than other utility organizations	25%	28%	30%	25%	26%	23%	32%	34%	27%

Statistically higher,  
95% confidence



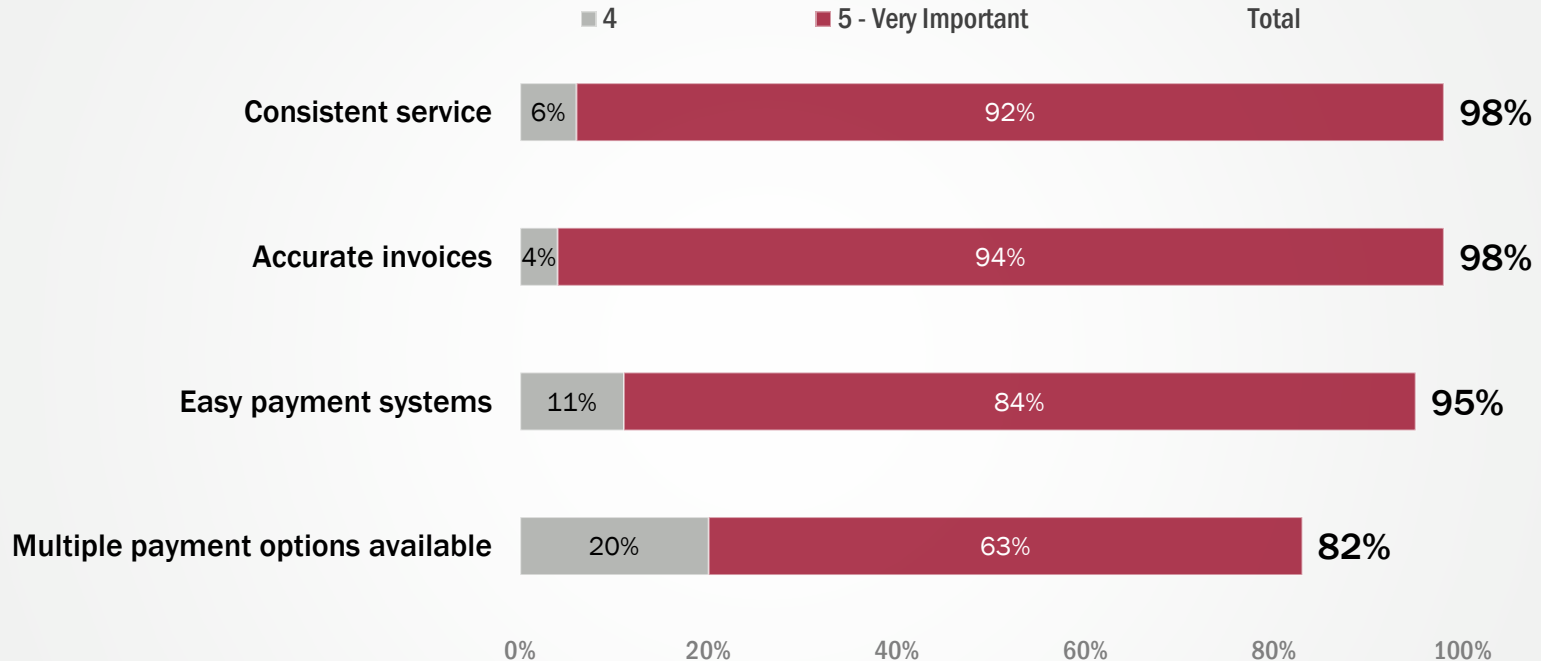
# IMPLICATION

While it's encouraging that these key measures have not slipped during these turbulent times, improvement may require targeted messages to the geographies and segments where scores are lower.

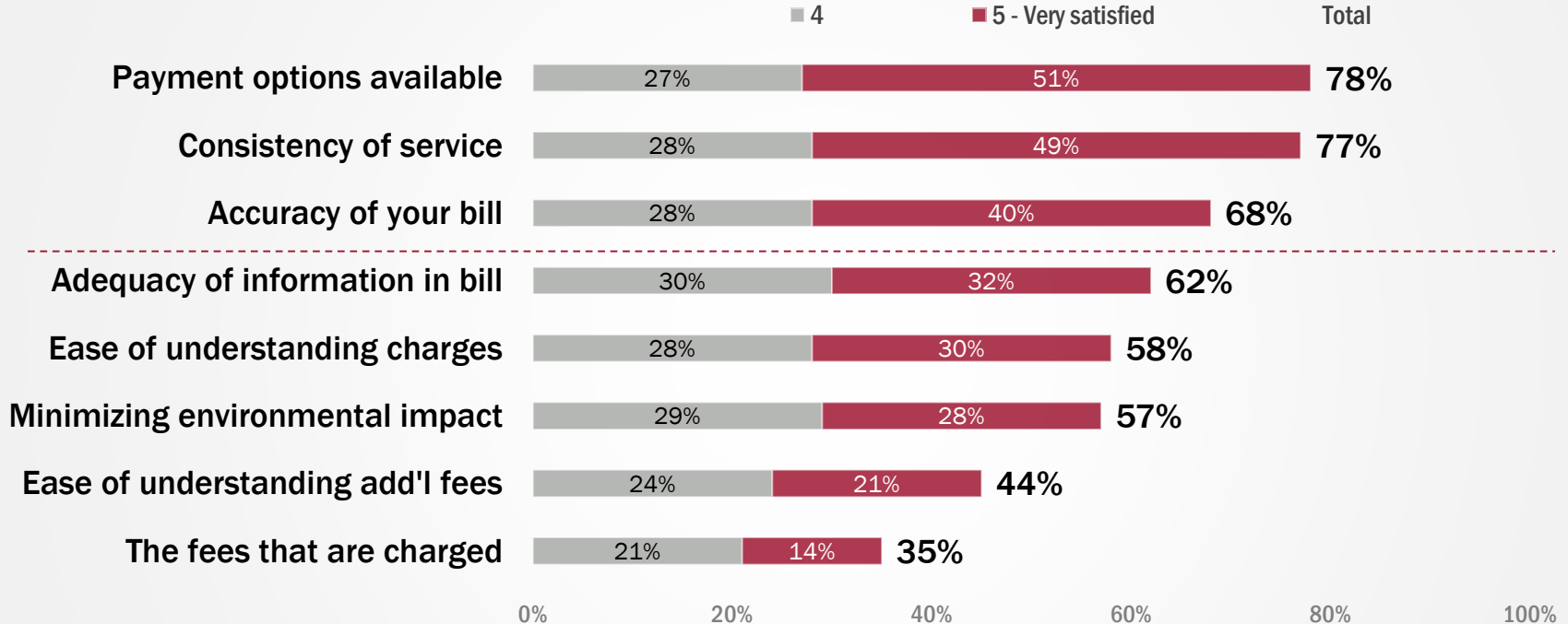
2

**While satisfaction with consistency of service and bill accuracy — the two most important aspects of any utility service — remains relatively strong, scores have slipped slightly since 2018.**

# All customers expect utilities to get the basics right. These are the non-negotiables in terms of **IMPORTANCE**



# HRSD **SATISFACTION** scores are good on the basics, but need to improve on communicating key information



## Satisfaction with service consistency and bill accuracy has declined slightly since 2018, while satisfaction with minimizing environmental impact has increased

ASPECT OF SERVICE (% 4 or 5-Very Satisfied)	2018	2020
Payment options available	77%	78%
Consistency of service	80%	77%
Accuracy of your bill	71%	68%
Adequacy of information in bill	63%	62%
Ease of understanding charges	58%	58%
Minimizing environmental impact	51%	57%
Ease of understanding additional fees	45%	44%
The fees that are charged	37%	35%

Statistically higher,  
95% confidence



# HRSD billing customers have significantly higher **SATISFACTION** scores than HRUBS billing customers on all attributes

ISSUE (Scores of 4 or 5 Total)	HRSD BILLING RESPONDENTS	HRUBS BILLING RESPONDENTS
The payment options available	80%	76%
The fees that are charged	41%	29%
The ease of understanding your utility charges	63%	51%
The ease of understanding the additional fees	50%	36%
The consistency of service	79%	74%
The adequacy of information included in your bill	66%	56%
The accuracy of your bill	73%	61%
Minimizing environmental impact of wastewater treatment	62%	50%

Statistically higher,  
95% confidence

HRSD n = 1,266  
HRUBS n = 889



# Understanding gap analysis

## Expectation vs. performance

The first step in identifying areas of opportunity is to look at **gap analysis**. This gathers ratings of what respondents find important when it comes to and ideal utility – their expectation.

The process then follows up by asking respondents how well those various attributes actually describe HRSD – its performance.

$$\begin{array}{ccccc} \text{AVERAGE} & & \text{AVERAGE} & & \text{GAP} \\ \text{PERFORMANCE} & \div & \text{IMPORTANCE} & = & \text{SCORE} \\ \text{of attribute} & & \text{of attribute} & & \end{array}$$

# There is room for improvement on customers' satisfaction with the accuracy of their bill

ATTRIBUTE	IMPORTANCE AVERAGE	PERFORMANCE AVERAGE	GAP SCORE	
The payment options available	4.4	4.2	96%	100% Perfect alignment
Consistency of service	4.9	4.2	86%	<b>Below 85%</b> Below expectations
The accuracy of your bill	4.9	4.0	<b>80%</b>	<b>Above 100%</b> Above expectations

Q10, How important do you feel it is for any utility to have the following:

Q14. How satisfied are you with the following aspects?

Note: "Don't know" responses were removed from this data set.

# While most customers get bills via email or online, one-third of Boomers still get their bills in the mail

## BY GENERATION

GET BILLS FROM HRSD OR HRUBS?	ALL	MILLENNIALS	GEN X	BOOMER +
Yes, in the mail	29%	22%	28%	33%
Yes, via email or online	72%	81%	75%	67%
Yes, via text	9%	10%	12%	6%
No, don't get bills	2%	1%	2%	3%
Unsure	3%	4%	2%	2%

# The vast majority of customers pay their bills online, even Boomers

PAY BILLS	ALL	MILLENNIALS	GEN X	BOOMER +
<b>ONLINE</b> via website	38%	43%	44%	29%
Automatically <b>ONLINE</b> via website	32%	41%	30%	30%
Pay <b>ONLINE</b> through my bank	21%	9%	17%	30%
By mail	4%	1%	2%	7%
Via link by text	3%	5%	4%	2%
By phone	2%	1%	2%	2%
In person	0.4%	0%	0.4%	0.6%

Summary of Online Payment Totals:

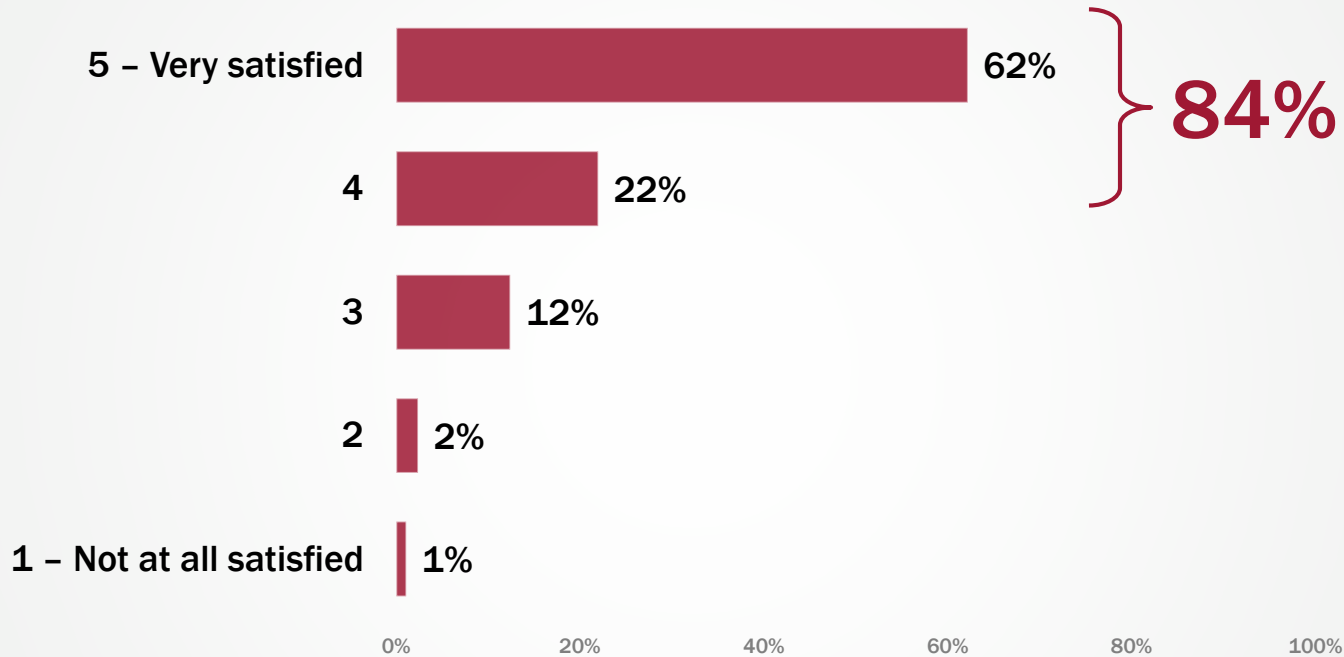
- All: 91% (38% + 32% + 21%)
- Millennials: 94% (43% + 41% + 9%)
- Gen X: 91% (44% + 30% + 17%)
- Boomer+: 89% (29% + 30% + 30%)

Statistically higher,  
95% confidence

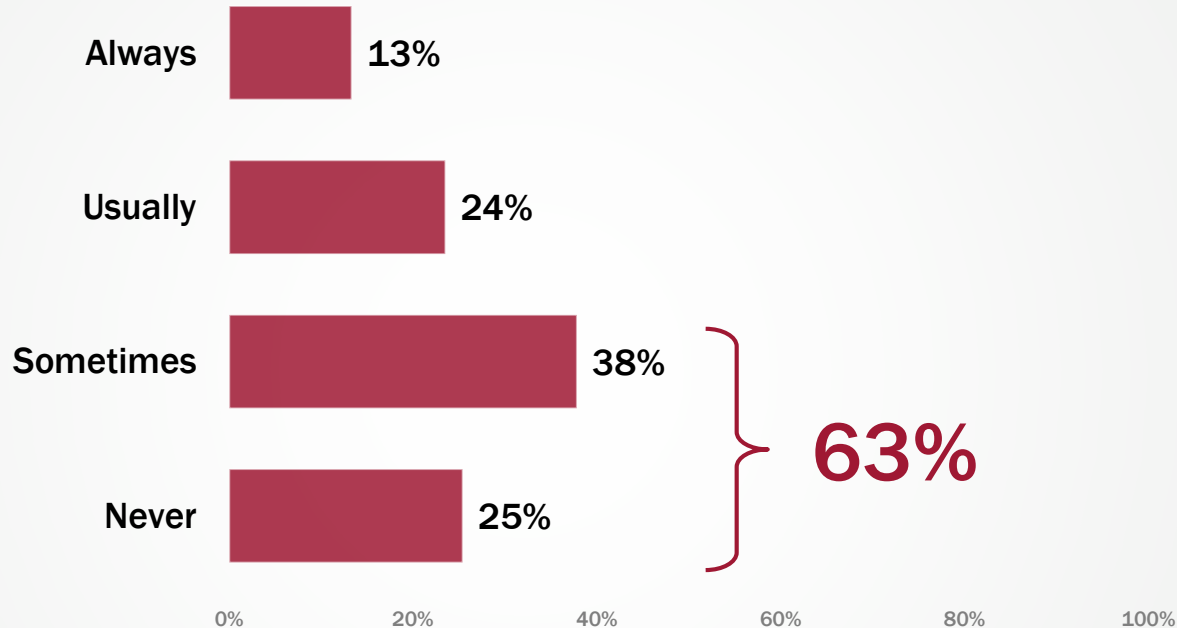
n = 2,653



# Most are happy with paying via the website



# Self-reported readership of bill inserts varies, but the majority say it's only "sometimes" or "never"



# IMPLICATION

Additional focus should be placed on both making sure customers' bills are correct and helping them to understand their bills to remove any confusion about their accuracy.



3

**There has been an encouraging drop in need to contact customer service since 2018, and satisfaction with all aspects of customer service continues to be strong.**

# Fewer customers reported contacting customer service to ask questions or dispute a billing issue than in 2018

CONTACT IN PAST 12 MONTHS	2018	2020
No	73%	80%
Yes, I had a question	12%	10%
Yes, I had a billing issue or dispute	11%	9%
Yes, I had another problem I needed HRSD to resolve	4%	3%

Statistically higher,  
95% confidence

# Preferred contact method for all is the phone, especially for Boomers, while one-fourth of Millennials prefer online chat

PREFERRED CONTACT METHOD	ALL	MILLENNIAL	GEN X	BOOMER+
Telephone	67%	59%	63%	74%
Email	16%	17%	18%	15%
Online chat	14%	24%	17%	7%
In person	2%	1%	1%	2%

Q19. If you have a billing issue, what is your preferred method of contacting HRSD?  
 BASE: those receiving bill in Q12

Statistically higher,  
 95% confidence

n = 2,653

## Preferred channel for problem resolution for all is the telephone, especially for Boomers, while Millennials lean toward virtual channels

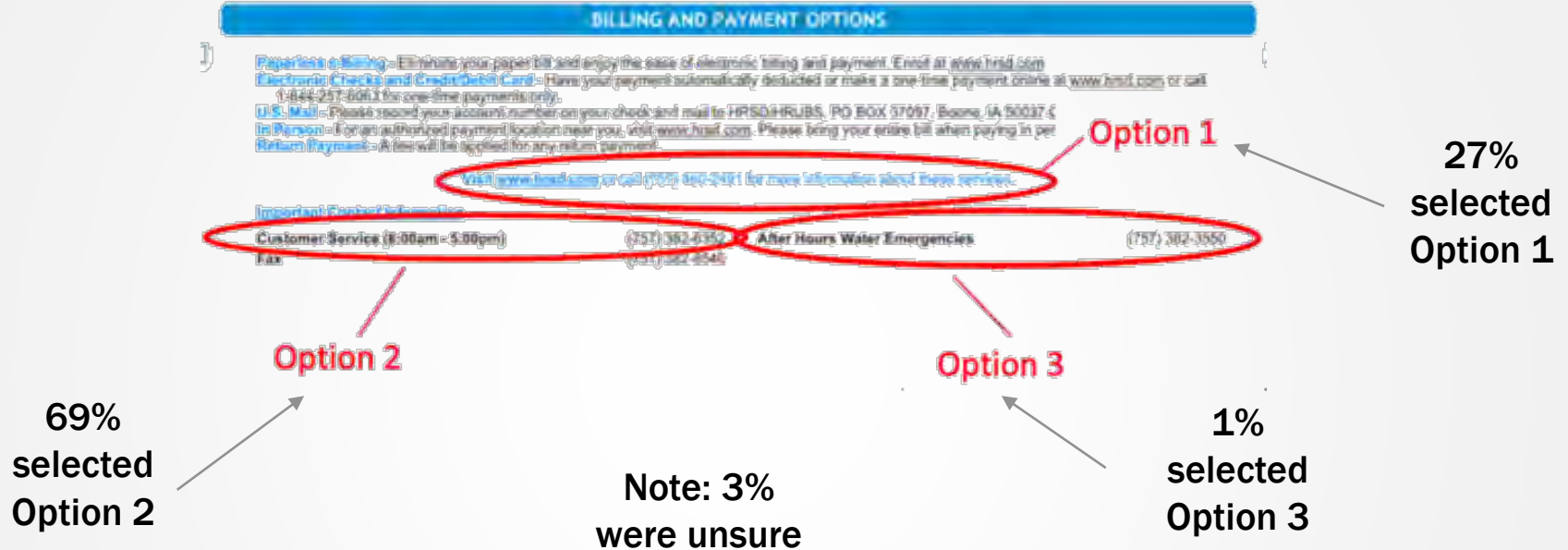
PROBLEM RESOLUTION CHANNEL	ALL	MILLENNIAL	GEN X	BOOMER+
Phone number on my bill	58%	45%	57%	62%
Website to find a phone number	30%	35%	31%	27%
Website Frequent Asked Questions (FAQs)	5%	10%	5%	5%
Website chat support	6%	10%	7%	5%
In-person	1%	1%	0%	2%

Q21. Where is the first place you usually go to resolve a question or problem?  
 BASE: those contacting customer service, Q20

Statistically higher,  
 95% confidence

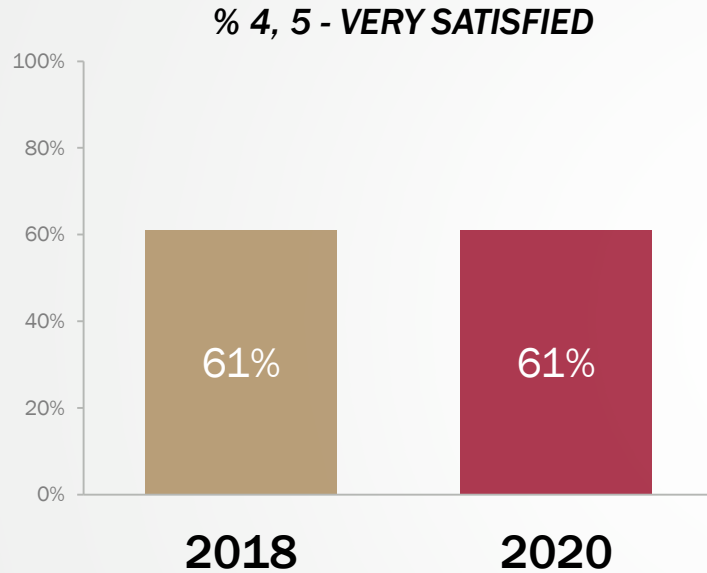
n = 564

# Over two-thirds of those referencing their bill to find a contact for HRSD/HRUBS selected the Customer Service number



Q22. Here you can see an image of a “typical” bill (your actual bill format may vary slightly). Which of the numbers would you call first to resolve a problem or ask a question? BASE: those selecting “phone number on bill” as the first place they go in Q21

# There has been no change in satisfaction with the care customers are receiving, and Millennials and Boomers are more satisfied than Gen X



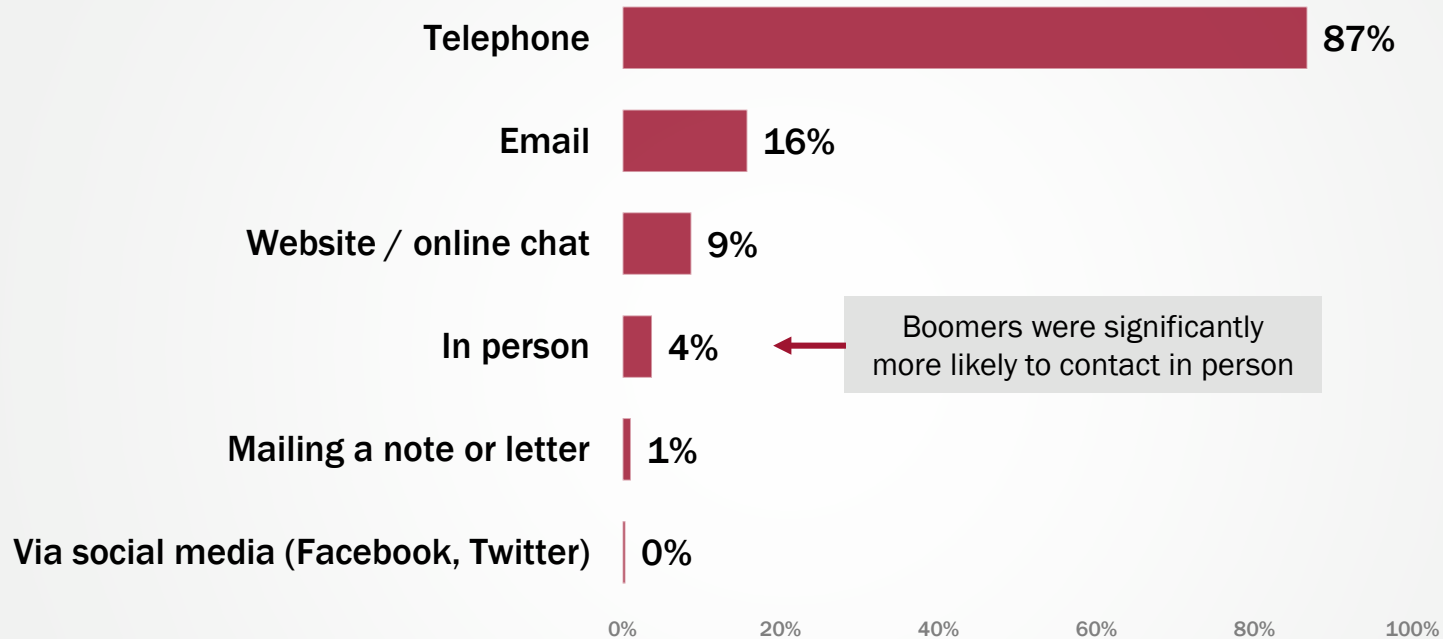
% RATING 4, 5-VERY SATISFIED	MILLENNIALS	GEN X	BOOMER+
Satisfaction with customer service	69%	56%	67%

Statistically higher,  
95% confidence

2018 n = 575  
2020 n = 564



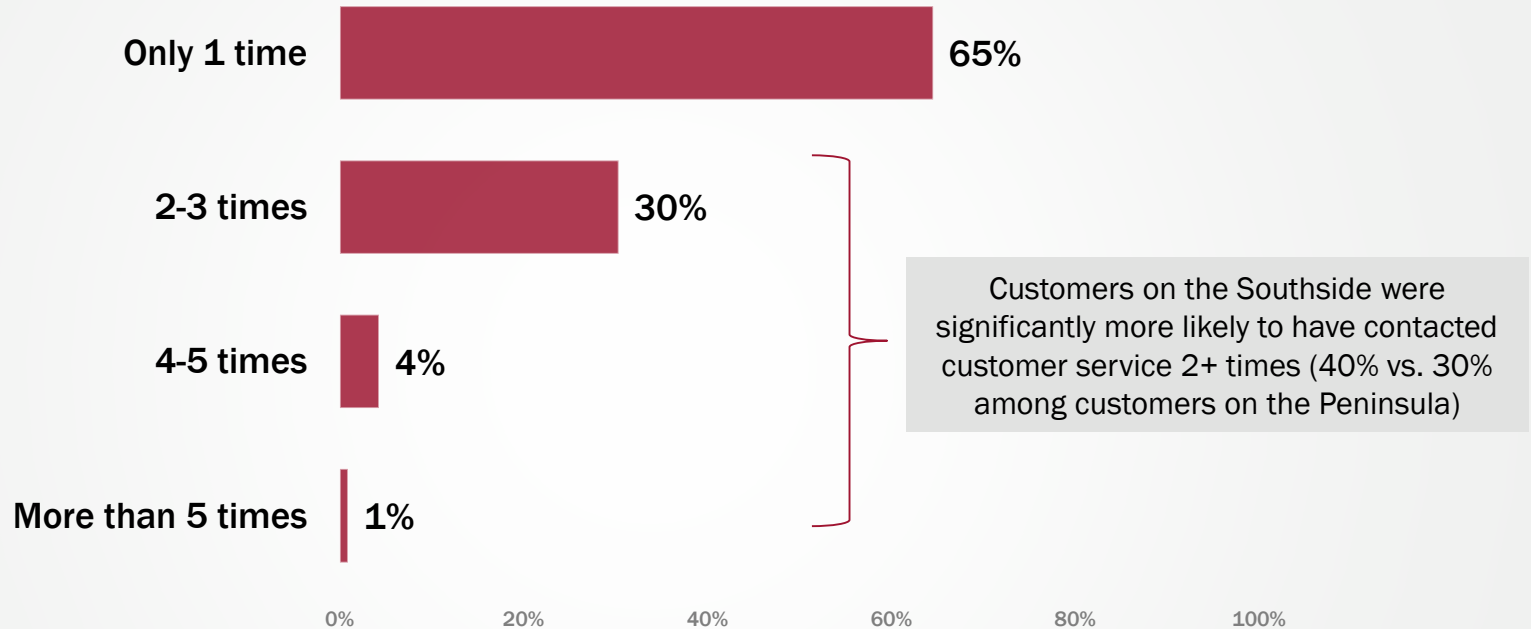
# Phone was the channel of choice for nearly nine out of 10 customers who contacted HRSD/HRUBS



Q24. In which ways did you contact [HRSD or HRUBS] about your most recent issue? Select all that apply.  
BASE: those contacting customer service, Q20

n = 564

# Nearly two-thirds of those contacting customer service did so only once





# Customers who made contact just once for general questions were most likely to have had their issue fully resolved

ISSUE RESOLUTION	Total	Number of times have you contacted customer service Q25		Reason for contacting customer service Q20		
		Only 1	2+ times	General Question	Billing issue / dispute	Problem Resolution
Yes	75%	84%	60%	82%	65%	70%
No	15%	11%	22%	11%	20%	14%
Still in progress	4%	2%	8%	2%	5%	6%
Not sure	6%	4%	11%	5%	10%	10%

Q25. Was this issue resolved or the question answered to your satisfaction?  
 BASE: those contacting customer service, Q20

Statistically higher,  
 95% confidence

n = 564



# Overall satisfaction is lower among customers who have contacted customer service multiple times or had a billing dispute

OVERALL SATISFACTION	Number of times have you contacted customer service Q25			Reason for contacting customer service Q20		
	None	Only 1	2+ times	General Question	Billing issue / dispute	Problem Resolution
% Rating 4, 5 – Very Satisfied	58%	57%	38%	53%	45%	52%

Statistically lower, 95% confidence

Q8. Based on what you may know about HRSD, how satisfied are you with HRSD’s services overall?

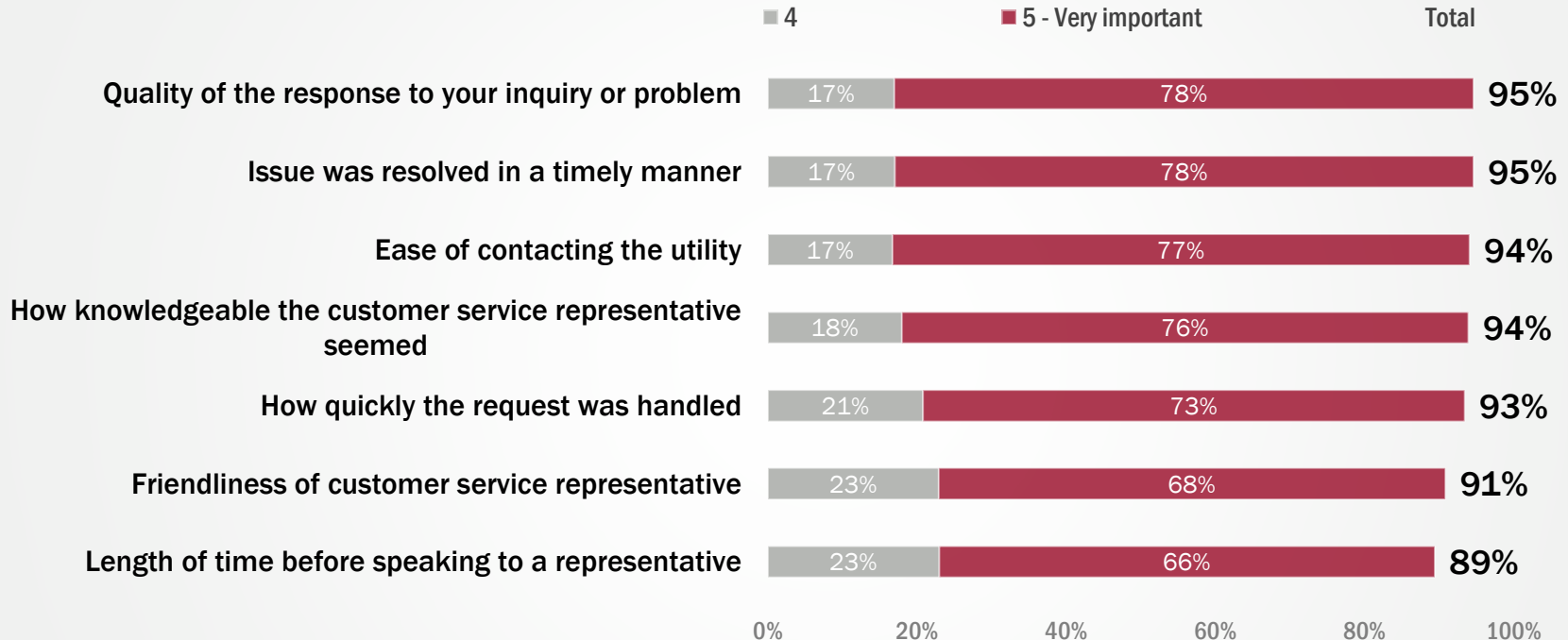
Q20. In the past 12 months, have you contacted HRSD Customer Service to ask a question or report a problem?

Q25. How many times have you contacted HRSD/HRUBS customer service regarding your most recent issue or question?

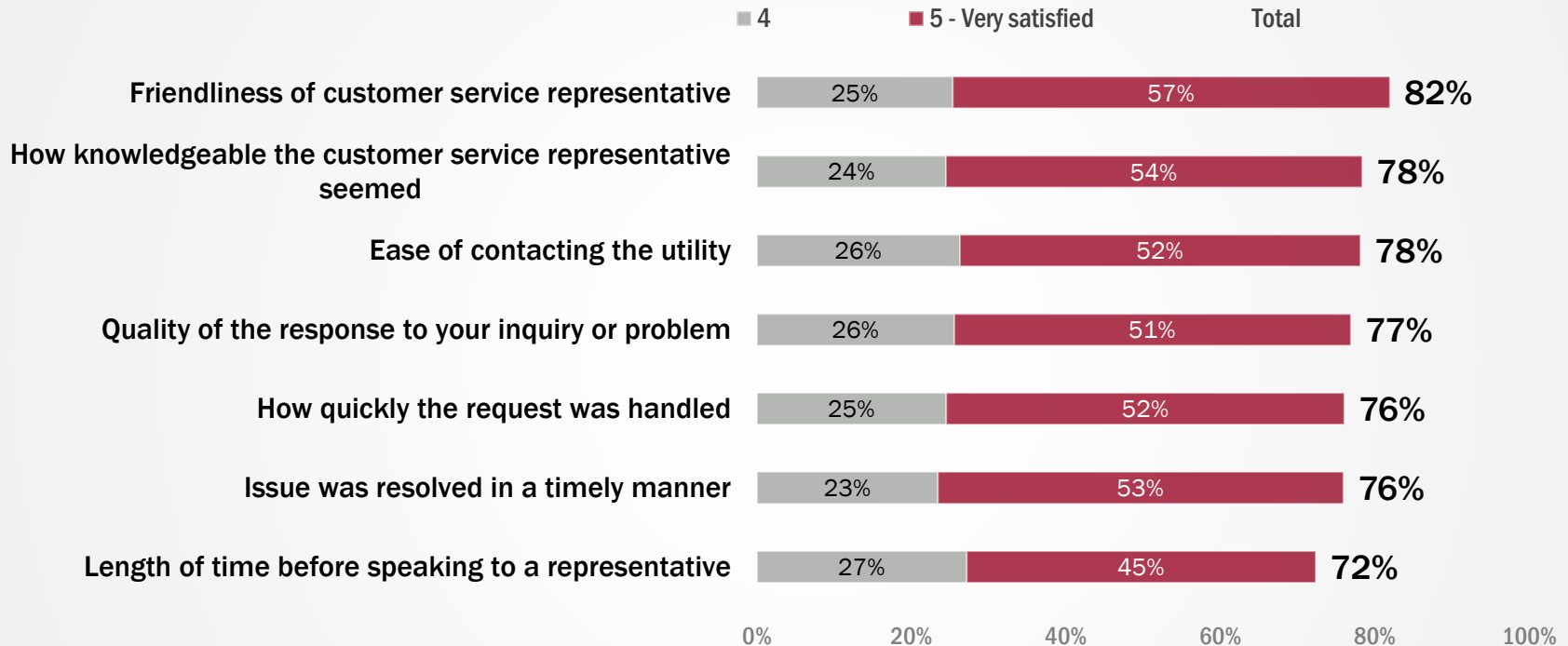
n = 2,784



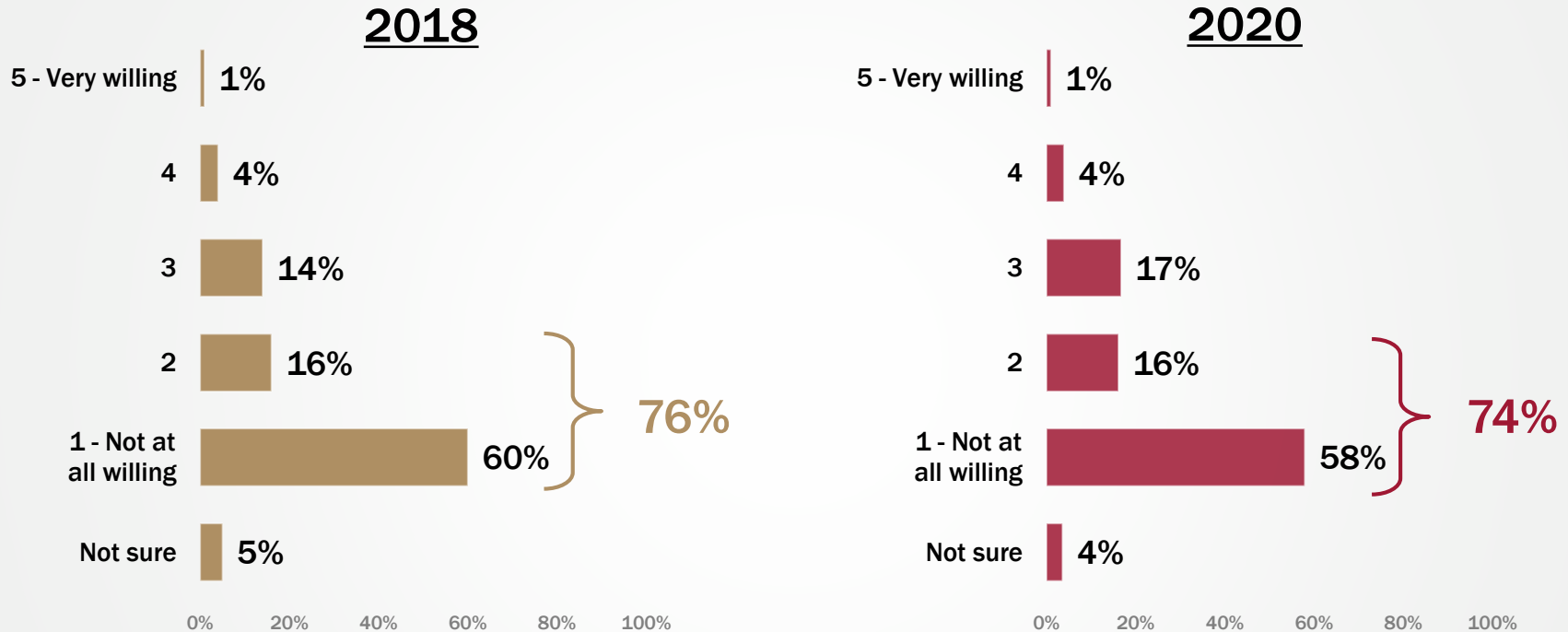
# Everything is **IMPORTANT** when it comes to interacting with any utility's customer service department



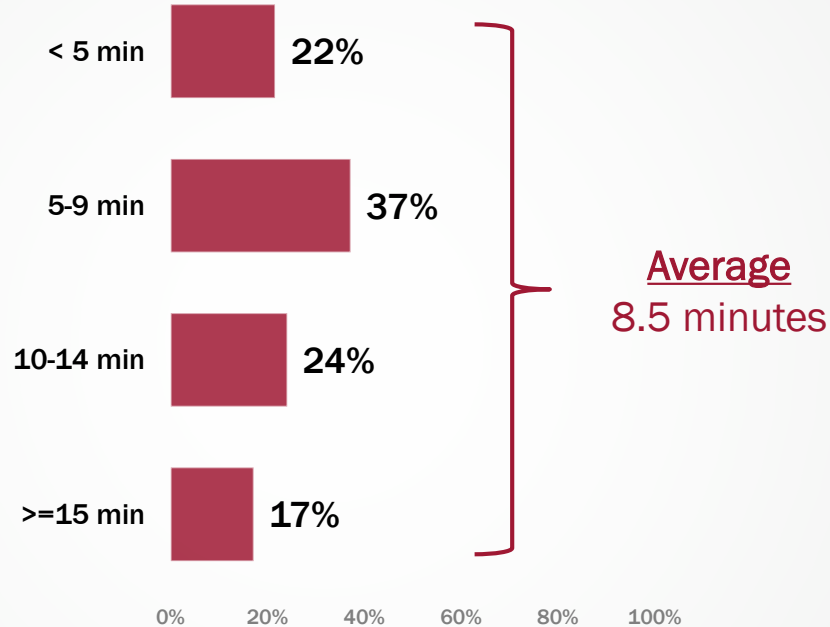
# Customer care **SATISFACTION** scores are strong among two-thirds or more of customers across all aspects of service



# Unchanged from 2018, around three-fourths of customers are **NOT WILLING** to pay more to decrease call wait times



# Over half of customers are willing to wait less than 10 minutes when calling for service



# None of the gaps between **IMPORTANCE** and **SATISFACTION** are problematic (one can rarely meet the ideal)

CUSTOMER SERVICE ATTRIBUTES	IMPORTANCE AVERAGE	PERFORMANCE AVERAGE	GAP SCORE
Friendliness of customer service representative	4.6	4.3	95%
How knowledgeable the customer service representative seemed	4.7	4.2	91%
How quickly the request was handled	4.6	4.2	90%
Ease of contacting the utility	4.7	4.2	90%
Length of time before speaking to a representative	4.5	4.1	90%
Quality of the response to your inquiry or problem	4.7	4.2	89%
Issue was resolved in a timely manner	4.7	4.2	88%

**100%**  
Perfect alignment

**Below 85%**  
Below expectations

**Above 100%**  
Above expectations

Q27. How important to you are the following aspects of a customer service contact for any utility?

Q28. How satisfied are you with the following aspects of your customer service contact?

n = 2,784



# IMPLICATION

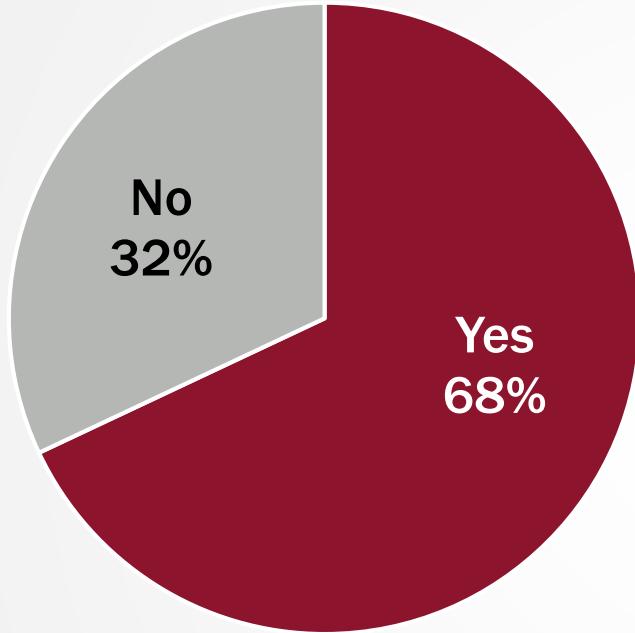
The decline in customer service contacts should be celebrated, and any programs put in place to support this positive trend should be continued.



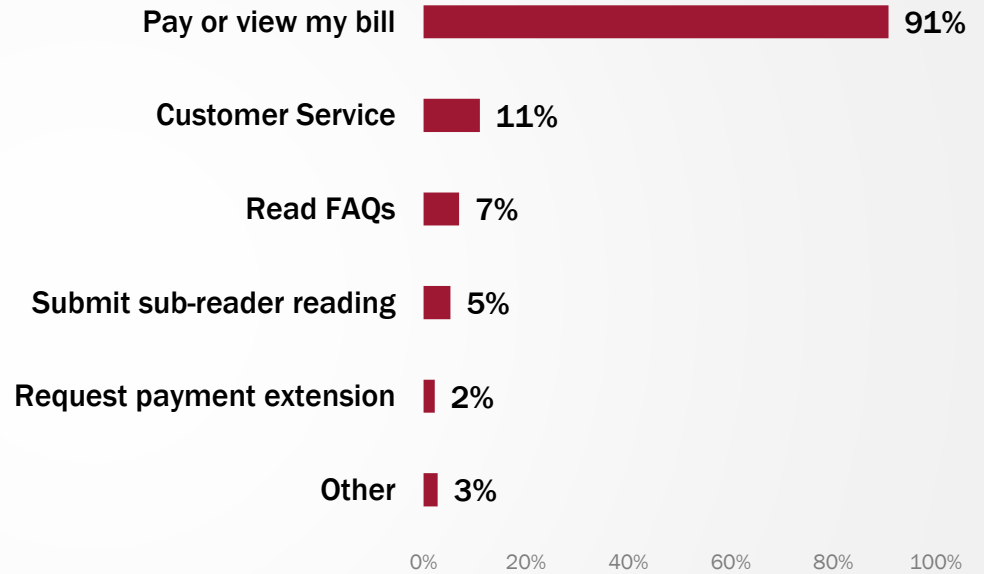
4

**Satisfaction with the HRSD website continues to be solid and is especially strong for those using the site to view or pay their bill. Boomers are significantly less likely to visit the HRSD site.**

# Over two-thirds of customers visit the HRSD website, and nearly all do so to view or pay their bill



n = 2,784



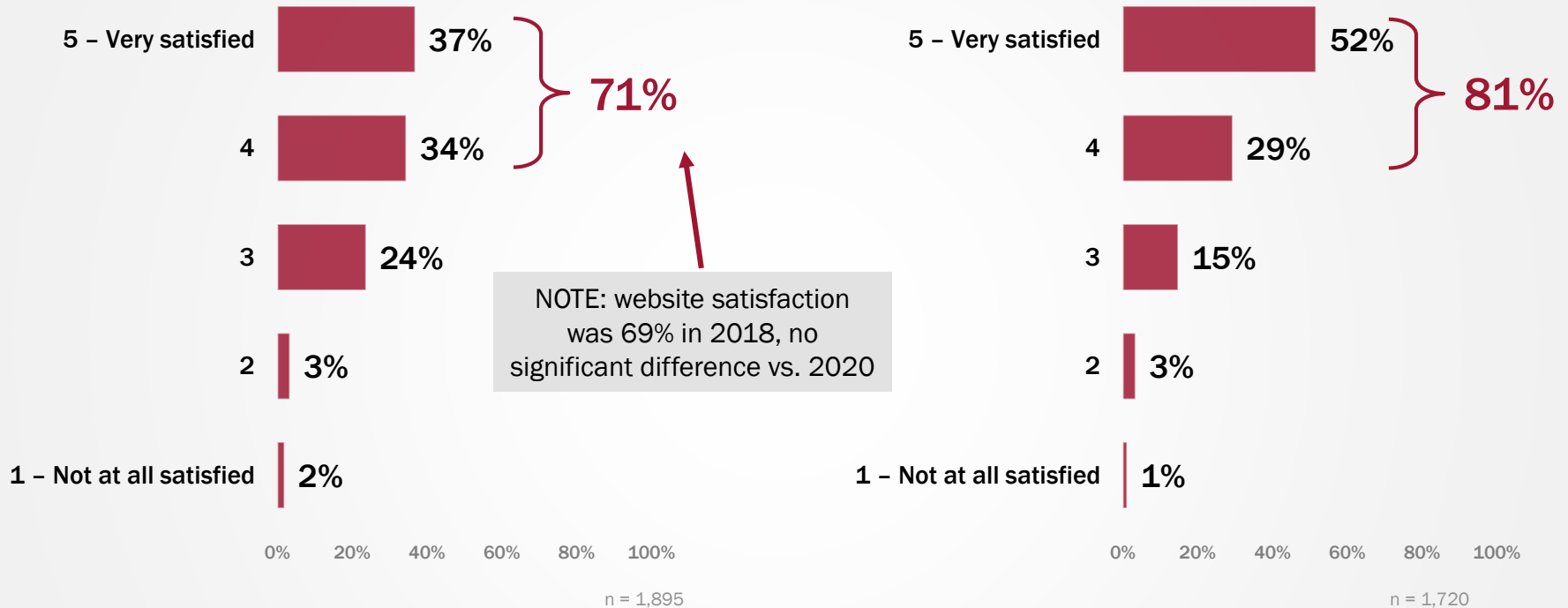
n = 1,895

61 Q31. In the past 12 months, have you visited the HRSD website?

Q32. Why have you visited the HRSD website? Select all that apply.  
BASE: those visiting HRSD website



# Satisfaction with the site continues to be strong overall, especially among those using the site to view and pay their bill



# Usage of the website is highest among younger generations, and satisfaction is higher among females

ATTRIBUTE	LOCATION		GENDER		GENERATION			GROUP	
	Southside	Peninsula	Male	Female	Millennial	Gen X	Boomer+	HRSD	HRUBS
Visited HRSD/HRUBS website, past 12 months	66%	70%	66%	69%	79%	72%	60%	69%	61%
Satisfaction with website (% 4, 5-Very Satisfied)	72%	70%	70%	74%	74%	72%	70%	72%	67%
Satisfaction with paying bill (% 4, 5-Very Satisfied)	81%	81%	79%	84%	83%	84%	82%	81%	80%

Statistically higher, 95% confidence

Q31. In the past 12 months, have you visited the HRSD website?

Q33. Overall, how would you rate your level of satisfaction with the HRSD website? BASE: those visiting HRSD website

Q35. How would you rate your level of satisfaction with your ability to pay or view your bill? BASE: those paying/viewing bill on website

---

## Typical comments about dissatisfaction with site

**NOTE: There were very few respondents who were dissatisfied (5%)**

*“Cumbersome. Layout is horrible to find things- hence I call customer service. Layout isn’t intuitive like websites are supposed to be.”*

*“I want to pay my bill through the website but Do not want to pay to go through 3rd party to do it. Very annoying.”*

*“I have been locked out and can’t get back in without calling. I usually access it in the evenings or on the weekends and they are not open.”*

*“The website is very confusing to find and record submeter readings.”*

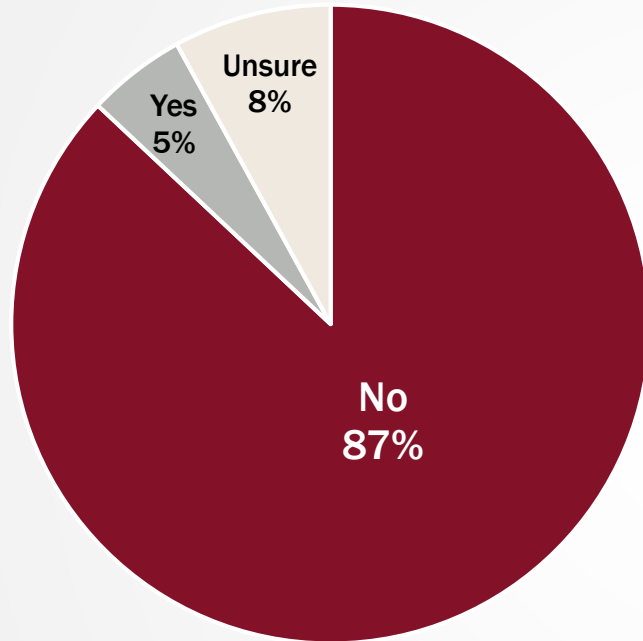
# IMPLICATION

Strong website satisfaction scores should be celebrated. While satisfaction is strong across generations, Boomers are notably less likely to visit the site, suggesting they could be a target for future campaigns to promote the site for customer self-service and bill paying needs.

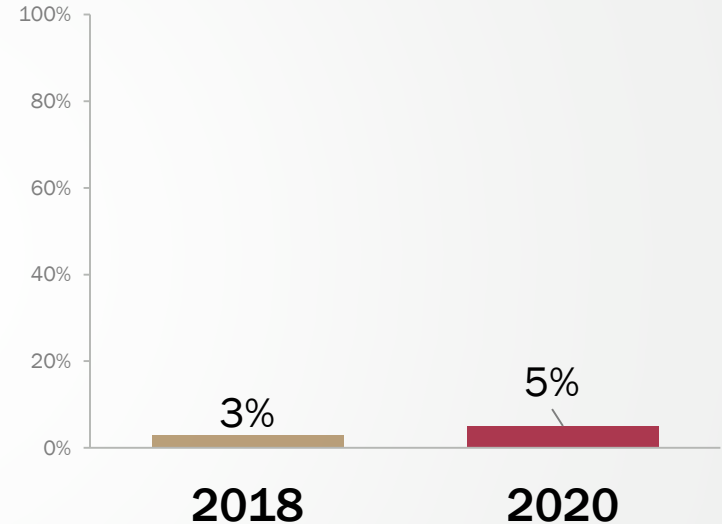
5

**Awareness of the SWIFT project continues to remain very low, and while most feel it's important to protect public health and waterways, many are not satisfied with HRSD's efforts in this arena.**

# While awareness of the SWIFT project has increased slightly since 2018, it remains very low

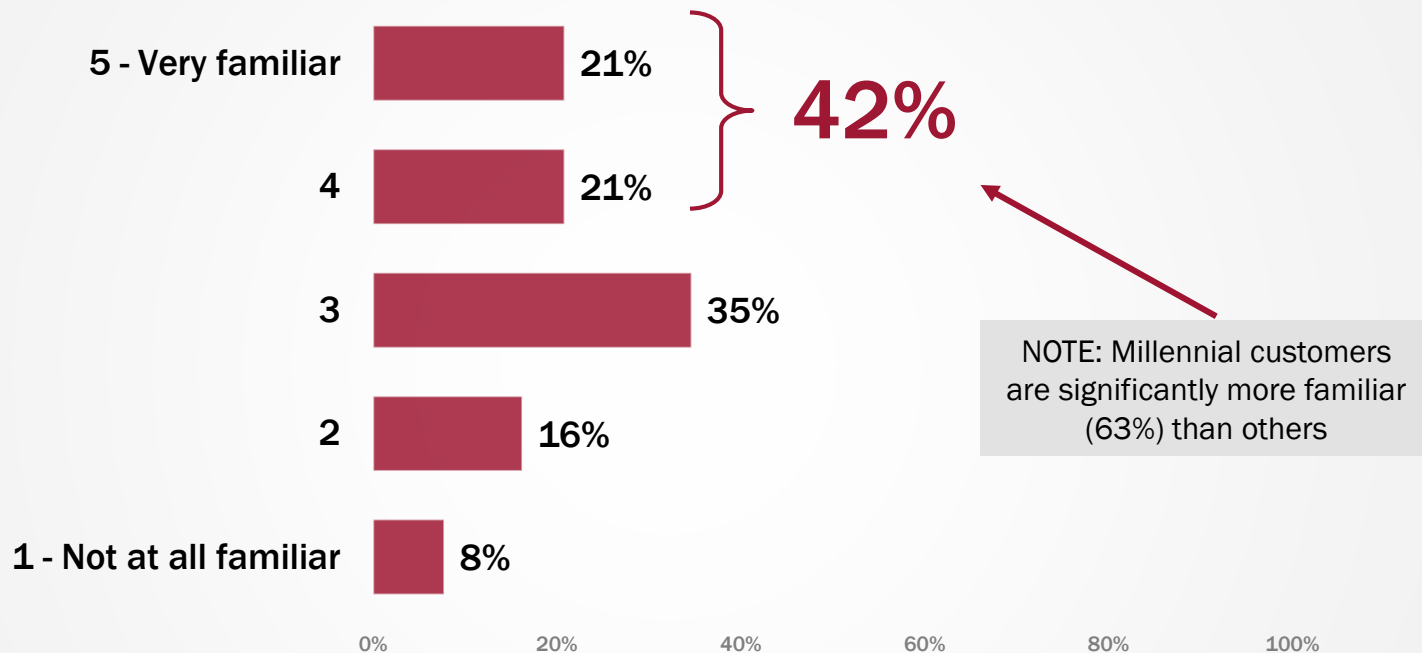


### SWIFT awareness

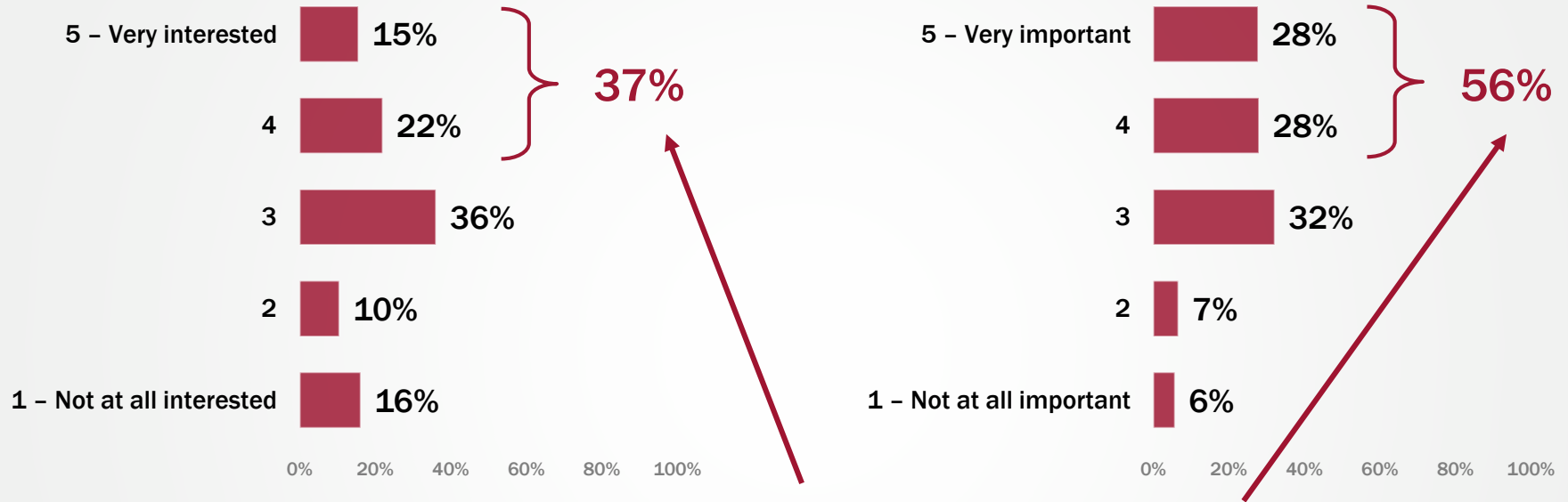




# Self-reported **FAMILIARITY** with SWIFT is low among those aware of the project



# Only one in three express strong interest in SWIFT, but more than half think the project is important, especially Boomers



NOTE: Boomers were slightly more interested in SWIFT (45%) and feel SWIFT is more important (62%)

ALSO: There was no change in interest in SWIFT or importance of SWIFT in 2020 compared to 2018

n = 2,784

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## Comments about the SWIFT Project are mixed

Q38. Do you have any overall comments for HRSD about SWIFT?

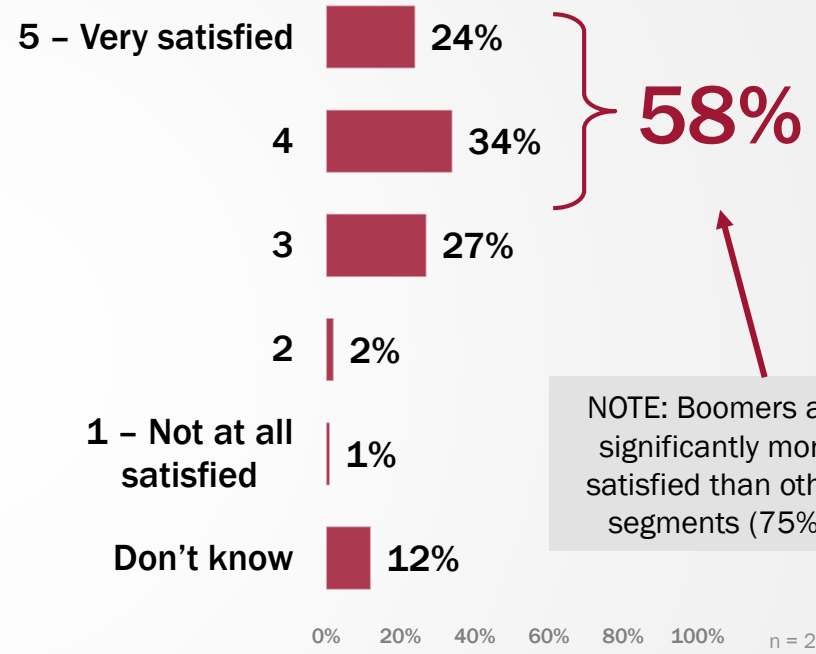
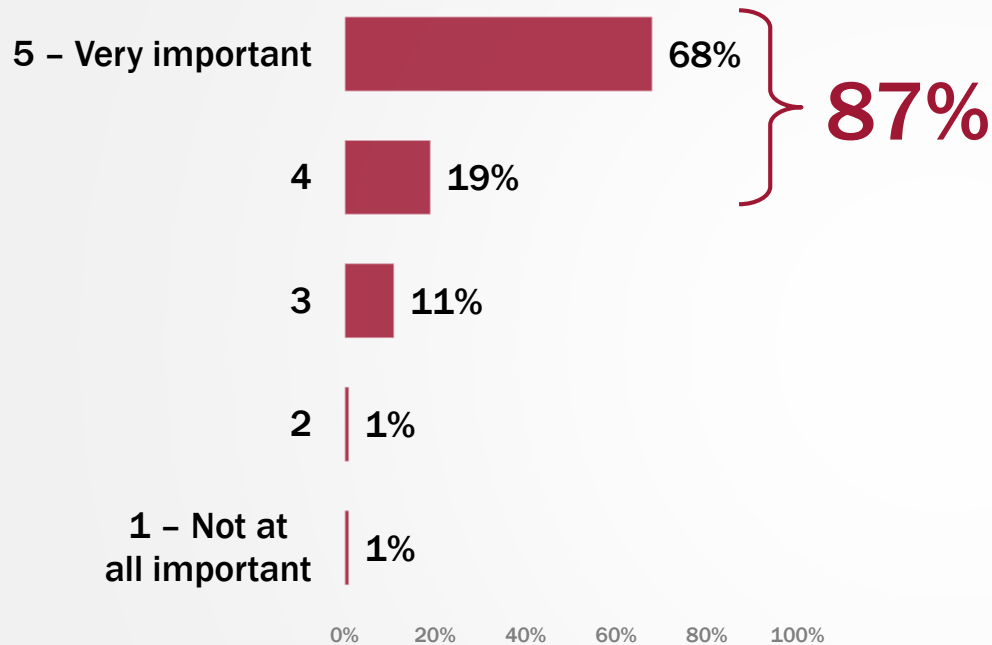
*“Anything that will help the environment and educate the community is great in my book.”*

*“Is this going to add another \$25.00 to my already ridiculous water bill?”*

*“This is the first time I have heard about swift. I think it a very interesting project.”*

*“Failure of a company to protect the environment in the past should not be a monetary burden on today's customer.”*

# While nearly nine out of 10 feel it's important to protect public health and waterways, less than six in 10 are satisfied with HRSD's efforts to do so

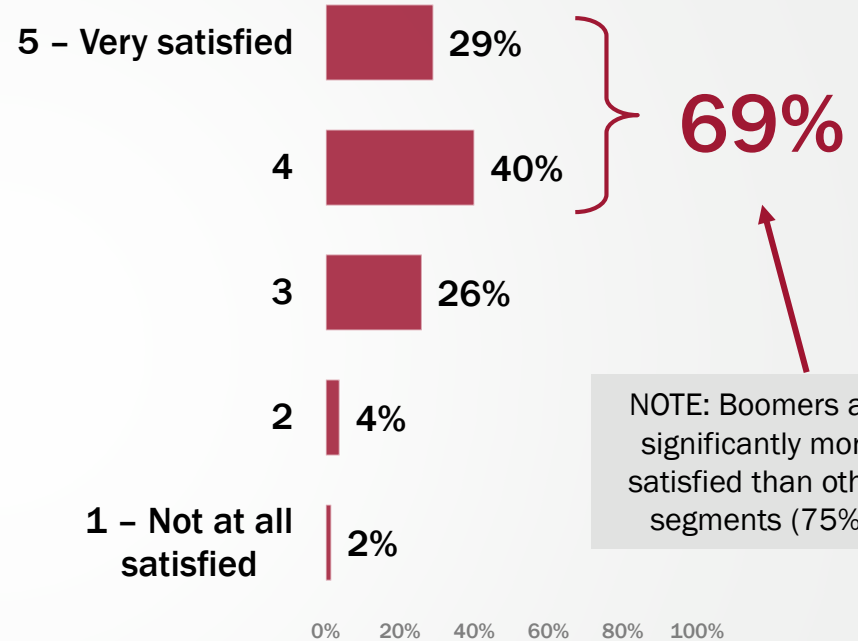
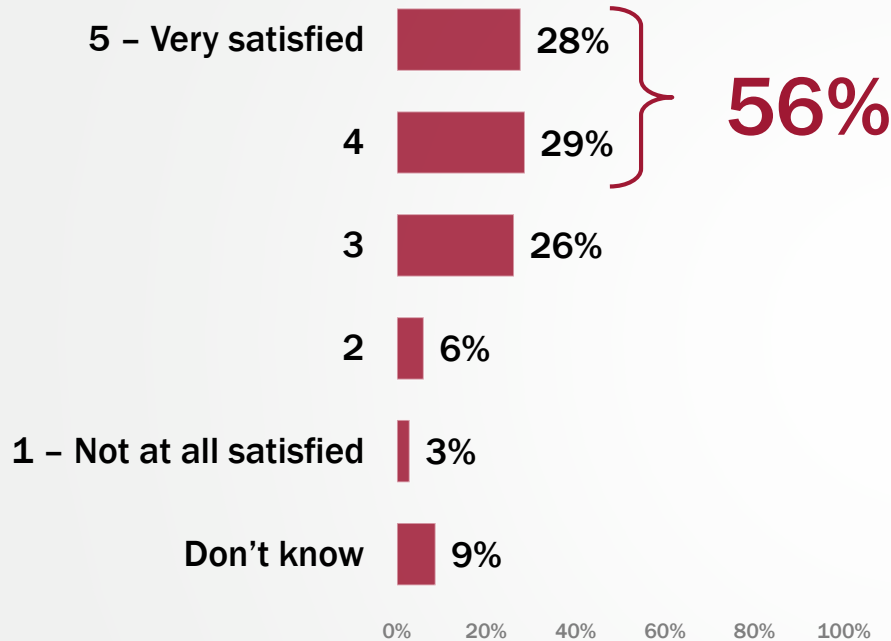


NOTE: Boomers are significantly more satisfied than other segments (75%)

n = 2,784



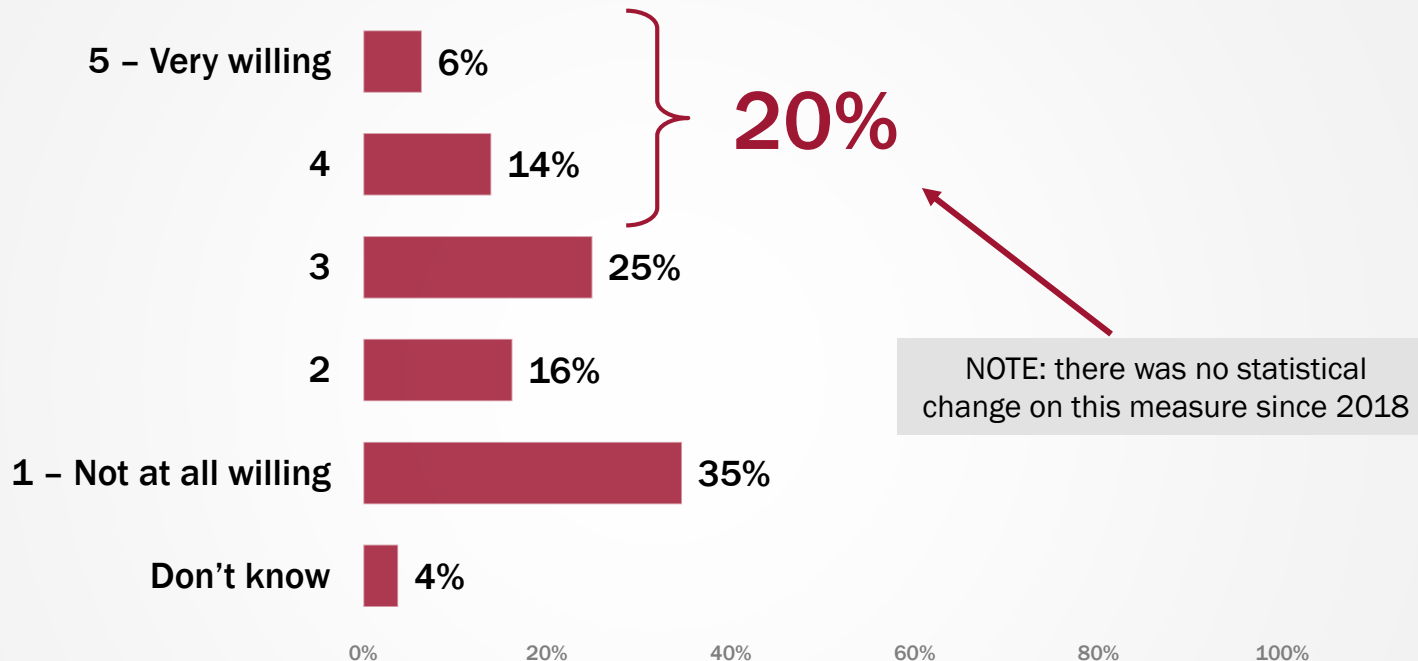
# SATISFACTION scores increase by the end of the survey, indicating that educating customers can have an impact



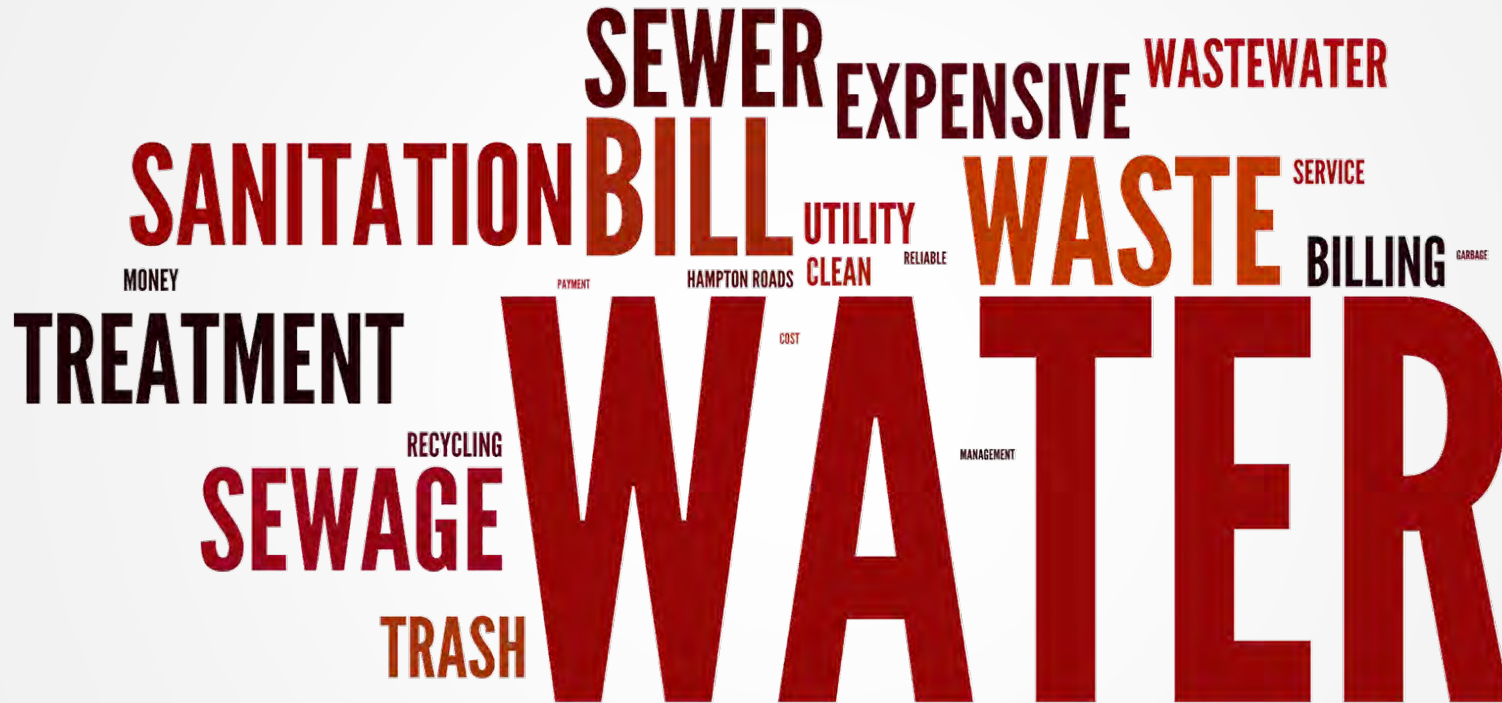
NOTE: Boomers are significantly more satisfied than other segments (75%)



# Only 20% of customers are willing to pay more for HRSD to fund **ENVIRONMENTAL EDUCATION EFFORTS**



Recall that HRSD is known mostly for dealing with “water”  
(when asked at the beginning of the survey)



At the end of the survey, we ask again for top of mind words and the list shifts...





“Environment” and “education” appear, and “trash” is mentioned much less frequently



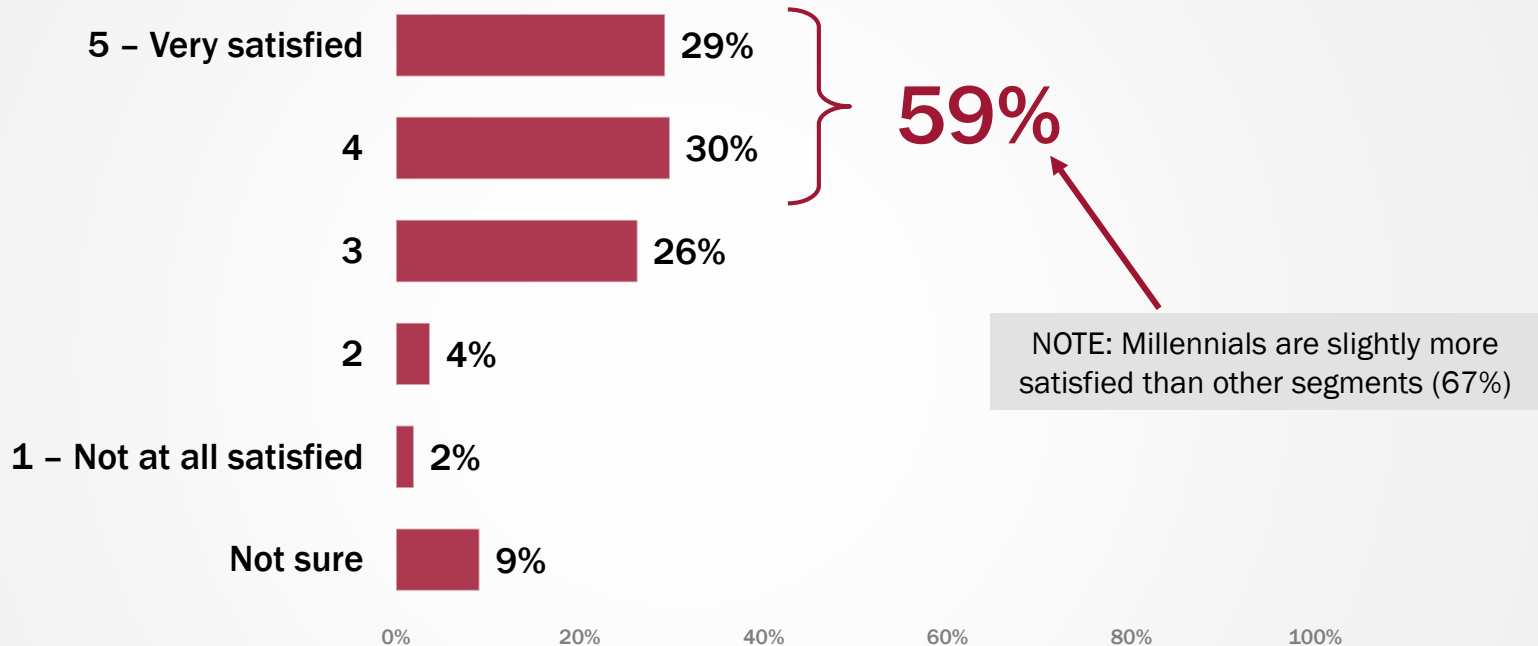
## IMPLICATION

Just over half are satisfied with HRSD's efforts to protect their health and waterways, and low awareness of SWIFT and HRSD's support of it is likely not helping with this perception challenge. While most aren't willing to pay more to fund these efforts, additional communication may help improve perceptions.

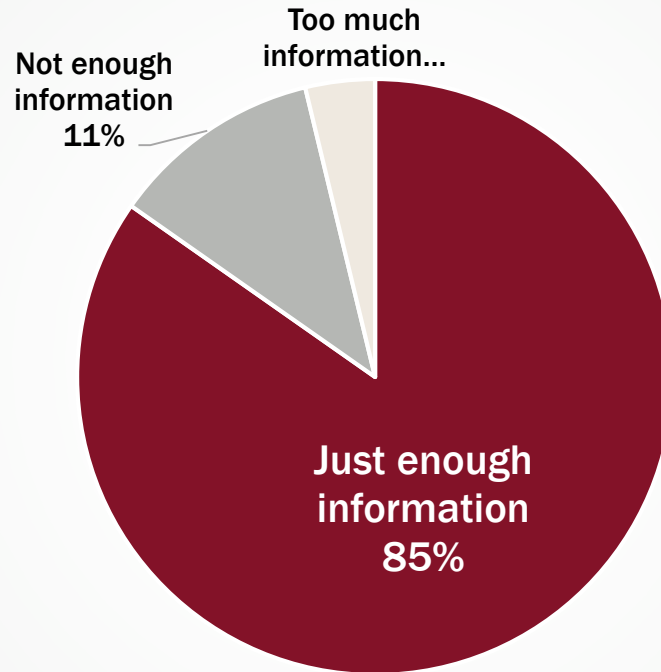
6

While a majority are satisfied and most feel they get the right amount of information from HRSD, customers' actual knowledge of HRSD's purpose and offerings continues to be very limited.

# Over half of customers are satisfied with HRSD's COMMUNICATIONS



# Most customers feel the amount of information they receive from HRSD is just right



# Respondents were asked about their overall knowledge level of what the HRSD organization does

Q40. TRUE OR FALSE?	ANSWER
HRSD provides wastewater treatment for several cities and counties in southeastern Virginia.	True
HRSD offers environmental improvement grants and scholarships.	True
HRSD provides area boaters a free pump out program during summer months.	True
HRSD provides environmental educational materials, lesson plans, facility tours, and a speakers' bureau.	True
HRSD offers an apprenticeship program.	True
HRSD is responsible for garbage collection throughout southeastern Virginia.	False
HRSD is responsible for setting my water rates. ( <i>added in 2020</i> )	False
HRSD treats the drinking water that comes into my home.	False

Q42. We want to understand your level of knowledge about HRSD as an organization.  
Which of the following statements are TRUE about HRSD?

# Confusion persists about HRSD's role

WHAT DOES HRSD DO?	CORRECT		WRONG	
	2018	2020	2018	2020
HRSD provides wastewater treatment for several cities and counties in southeastern Virginia. (TRUE)	86%	85%	14%	15%
HRSD is responsible for garbage collection throughout southeastern Virginia. (FALSE)	71%	72%	29%	28%
HRSD is responsible for setting my water rates. (FALSE)	NA	62%	NA	38%
HRSD treats the drinking water that comes into my home. (FALSE)	41%	42%	59%	58%
HRSD provides environmental educational materials, lesson plans, facility tours, and a speakers' bureau. (TRUE)	40%	38%	60%	62%
HRSD offers environmental improvement grants and scholarships. (TRUE)	28%	28%	72%	72%
HRSD offers an apprenticeship program. (TRUE)	17%	19%	83%	81%
HRSD provides area boaters a free pump out program during summer months. (TRUE)	13%	14%	87%	86%

Q42. We want to understand your level of knowledge about HRSD as an organization. Which of the following statements are TRUE about HRSD?

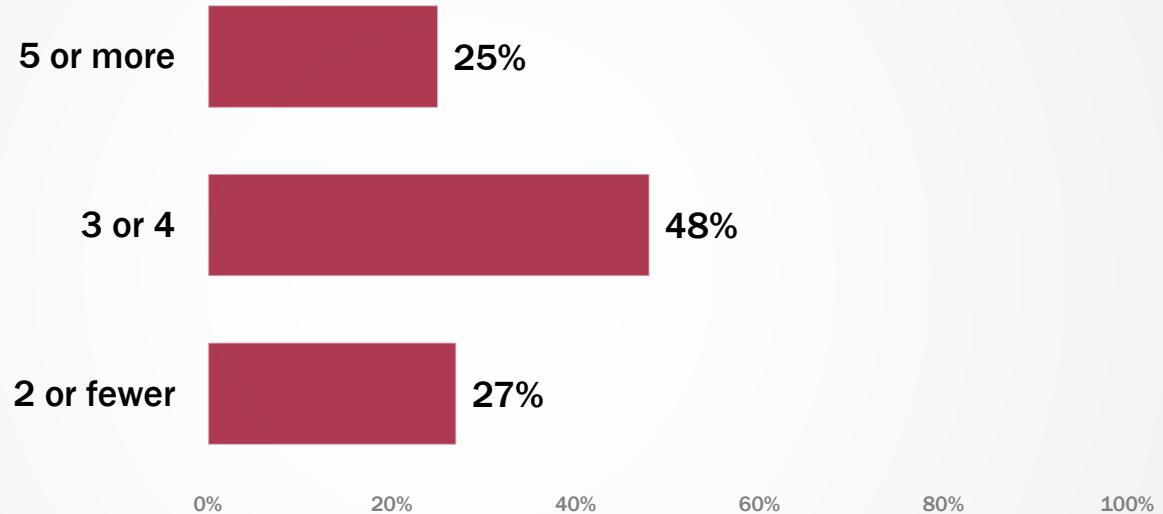
*Note: there were no significant differences, 2018 vs 2020*

2018 n = 2,191  
2020 n = 2,784



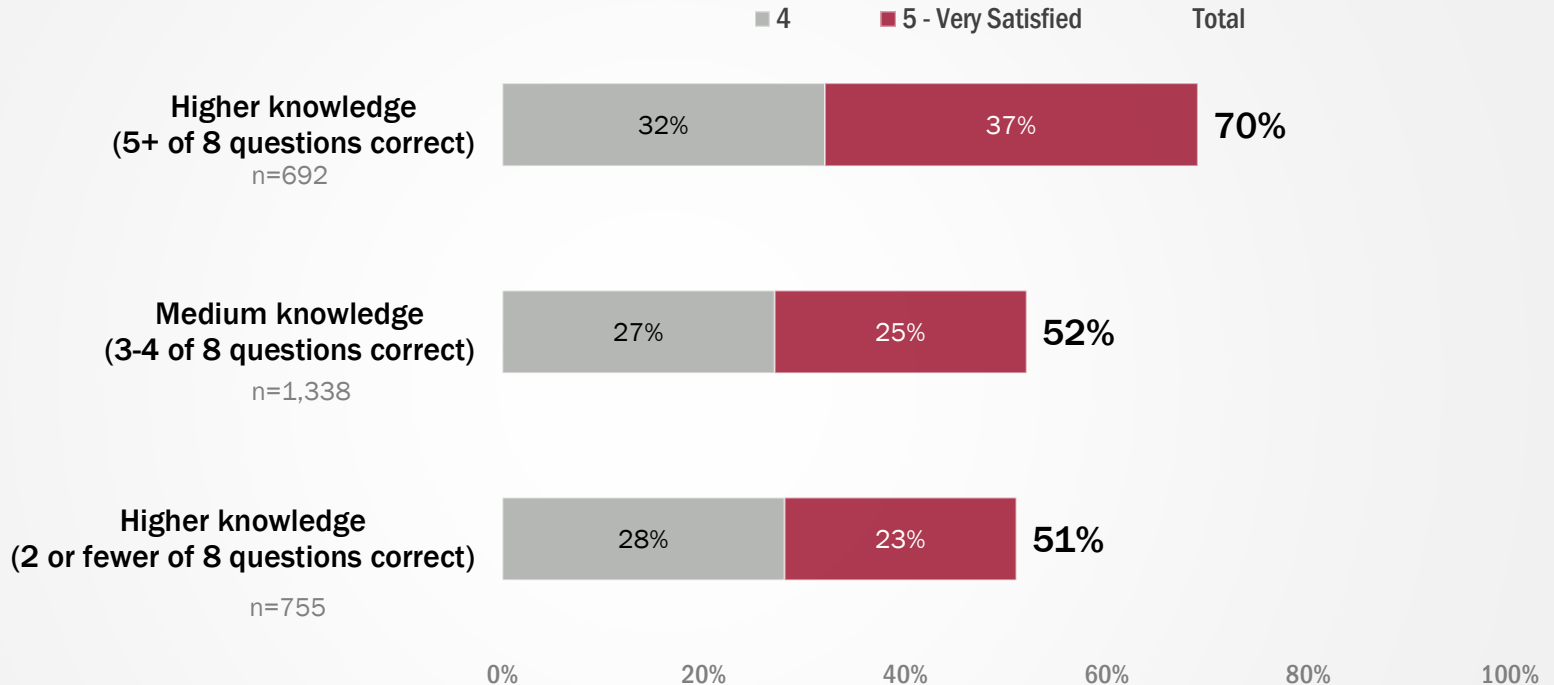
# Only one-fourth of customers have a strong knowledge of HRSD as an organization

## # OF 8 QUESTIONS ANSWERED CORRECTLY

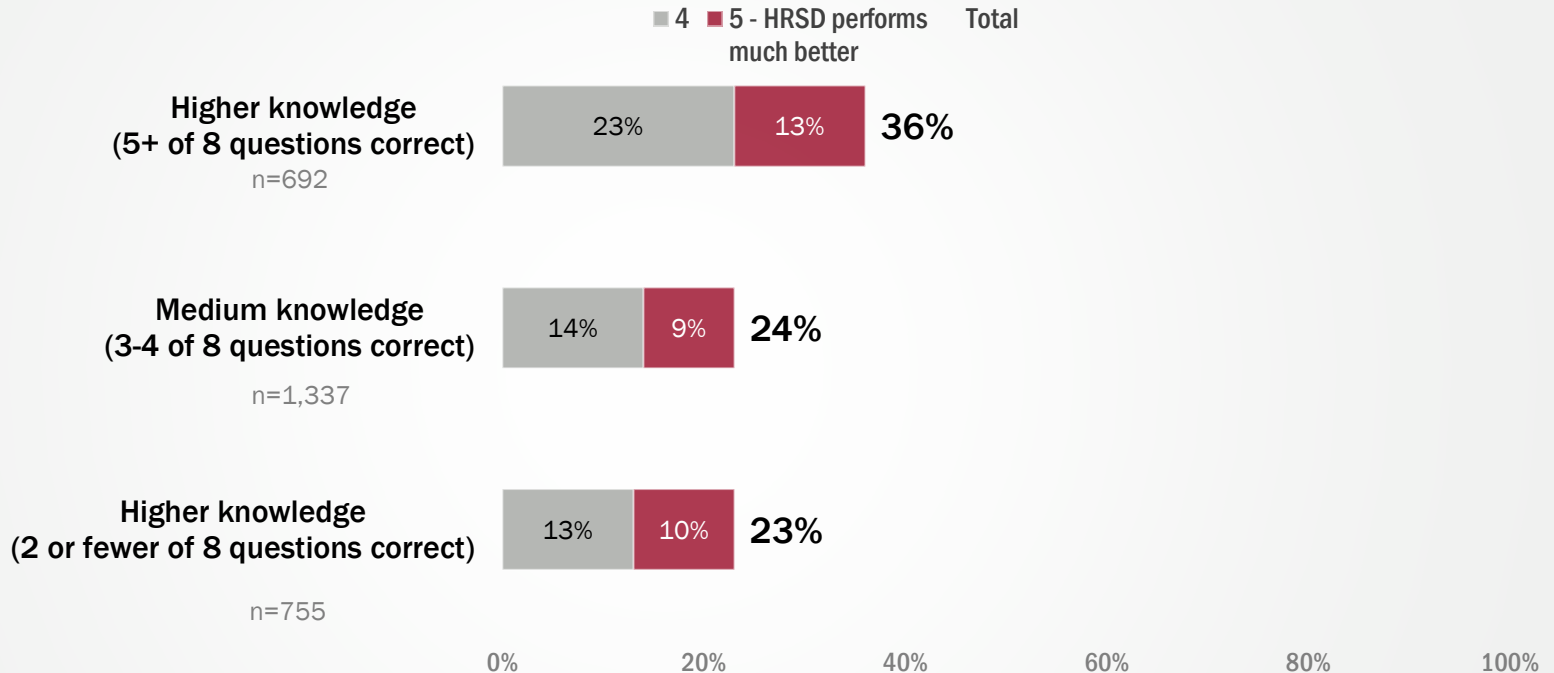




# Overall **SATISFACTION** levels improve with higher knowledge of HRSD



# PERFORMANCE scores also improve with higher knowledge of HRSD's offering



# SATISFACTION with services and billing is also higher among those more knowledgeable about HRSD

ISSUE (Scores of 4 or 5 Total)	LOWER ≤2/8 questions correct	MEDIUM 3-4/8 questions correct	HIGHER 5/8 questions correct
The consistency of service	66%	71%	79%
The accuracy of your bill	56%	62%	73%
The ease of understanding your utility charges	48%	54%	63%
The ease of understanding the additional fees	35%	39%	49%
The payment options available	69%	73%	79%
The adequacy of information included in your bill	51%	58%	67%
The fees that are charged	30%	32%	41%
Minimizing environmental impact of wastewater treatment	38%	45%	59%

Statistically higher,  
95% confidence

n = 2,785



## IMPLICATION

Increasing customers' knowledge of HRSD's purpose and offerings can lead to higher satisfaction and ratings of performance. Particularly on an environmental front, which customers indicate is very important, HRSD should better communicate and market its role in improving the environment.





**Hampton Roads Sanitation District  
Customer Satisfaction Study  
Wave 2**

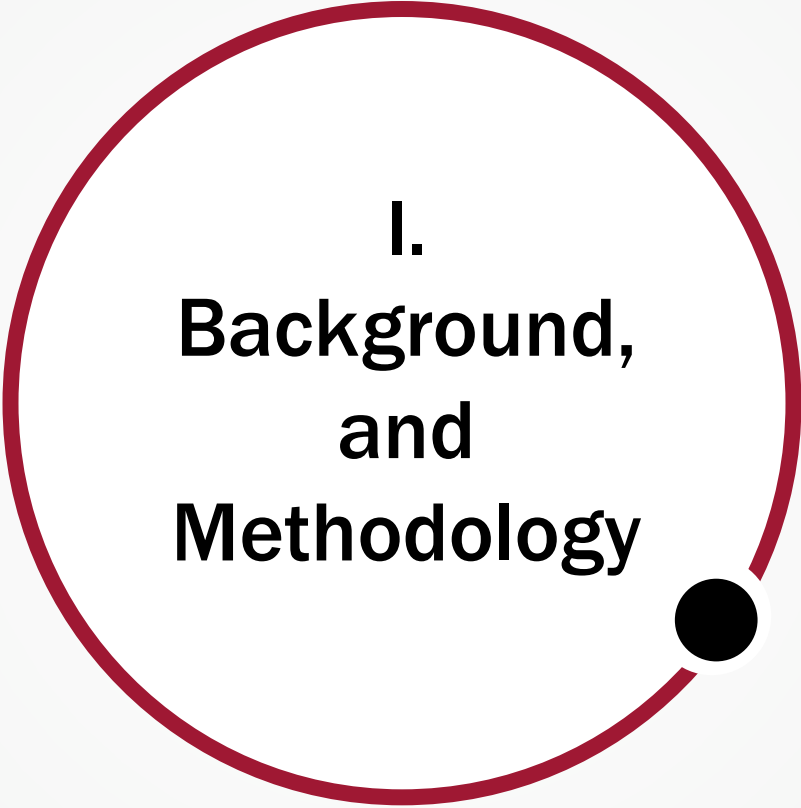
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Highlights  
November 24, 2020

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# Table of Contents

- I. Background and Methodology
- II. Executive Summary Highlights
- III. Detailed Findings



**I.  
Background,  
and  
Methodology**



# Background

The Hampton Roads Sanitation District was created in 1940 to protect public health and the waters of Hampton Roads by treating wastewater effectively. HRSD's service area includes 19 cities and counties, covering over 3,000 square miles, and 1.7 million citizens.

SIR was engaged to survey residential customers as part of a biannual tracking study of awareness, satisfaction, and communications preferences. Prior studies were conducted by another research company in 2009, 2011, 2013, and 2015, SIR conducted its Benchmark Wave of this study in 2018.



**This document shares the highlights of Wave 2 of the survey, conducted June-August 2020.**

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# Methodology

## ONLINE SURVEY

- Conducted among HRSD residential customers ages 18 and older
- Took 11 minutes, on average, to complete
- Fielded June 15 through August 11, 2020
- **n=2,784** responses collected
- Respondents were screened to ensure they have a primary or shared role in utility bill payment, and that they live in one of the 19 geographical areas within HRSD's service area.
- Incentivized by opportunity to earn a \$5 e-gift card from Starbucks

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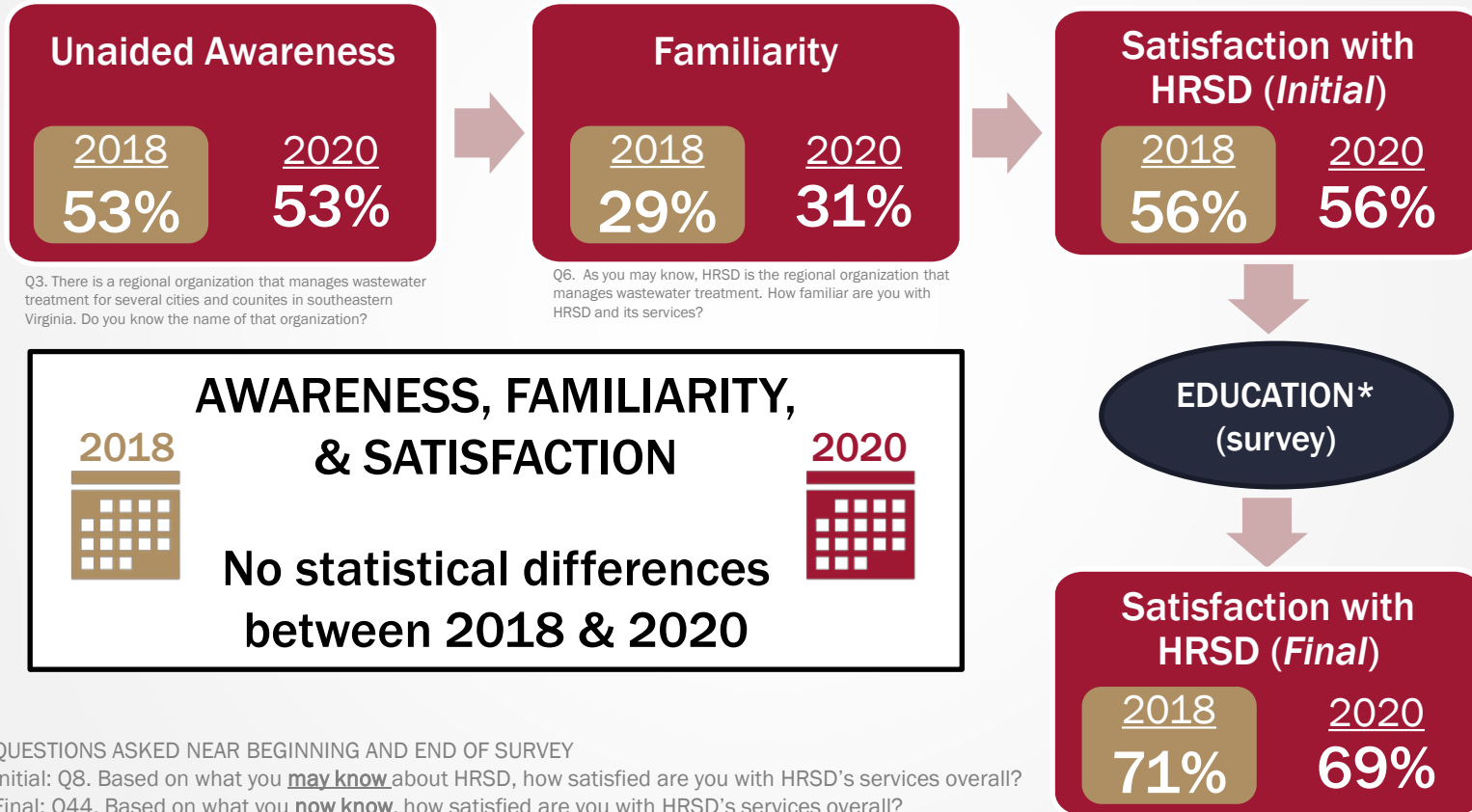
# Segmentation

- SIR analyzed the survey responses based on a wide range of variables to identify important differences among residential customers. Those included:
  - Geography/region
  - Respondent age/generation
  - Gender
  - Household income
  - HRSD vs. HRUBS customers
  - Knowledge score (based on True/False statements in Q42)
- In most cases, few significant differences appear across these segments. However, segments with large significant differences in responses are noted in the full report.



## **II. Executive Summary**

# Overall ratings of HRSD



\*QUESTIONS ASKED NEAR BEGINNING AND END OF SURVEY

Initial: Q8. Based on what you may know about HRSD, how satisfied are you with HRSD's services overall?

Final: Q44. Based on what you now know, how satisfied are you with HRSD's services overall?

## HRSD Customer Care



**61%**

of respondents are satisfied  
with HRSD customer care

No statistically significant  
changes between  
2018 & 2020

9

Q23. Overall, how would you rate your level of satisfaction with HRSD/HRUBS customer care?

## TOP ATTRIBUTES of HRSD customer care



Q28. How satisfied are you with the following aspects of your customer service contact?



# HRSD Website Bill Pay



**72%**  
receive bills via  
email or online  
(81% of Millennials)



**91%**  
pay their bills  
online



**84%**  
are satisfied with  
the payment  
process online

Q12. Does your household receive bills from [HRSD or HRUBS] for wastewater treatment?

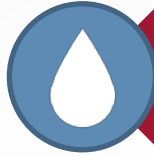
Q16. How do you usually pay your [HRSD or HRUBS] bill?

Q17. How satisfied are you with the ease of making a payment through HRSD's website?

# SWIFT – Sustainable Water Initiative for Tomorrow



No statistically significant changes between 2018 & 2020



5% awareness of SWIFT



45% familiarity (of those aware)



37% interested in SWIFT



56% find projects like SWIFT important or very important

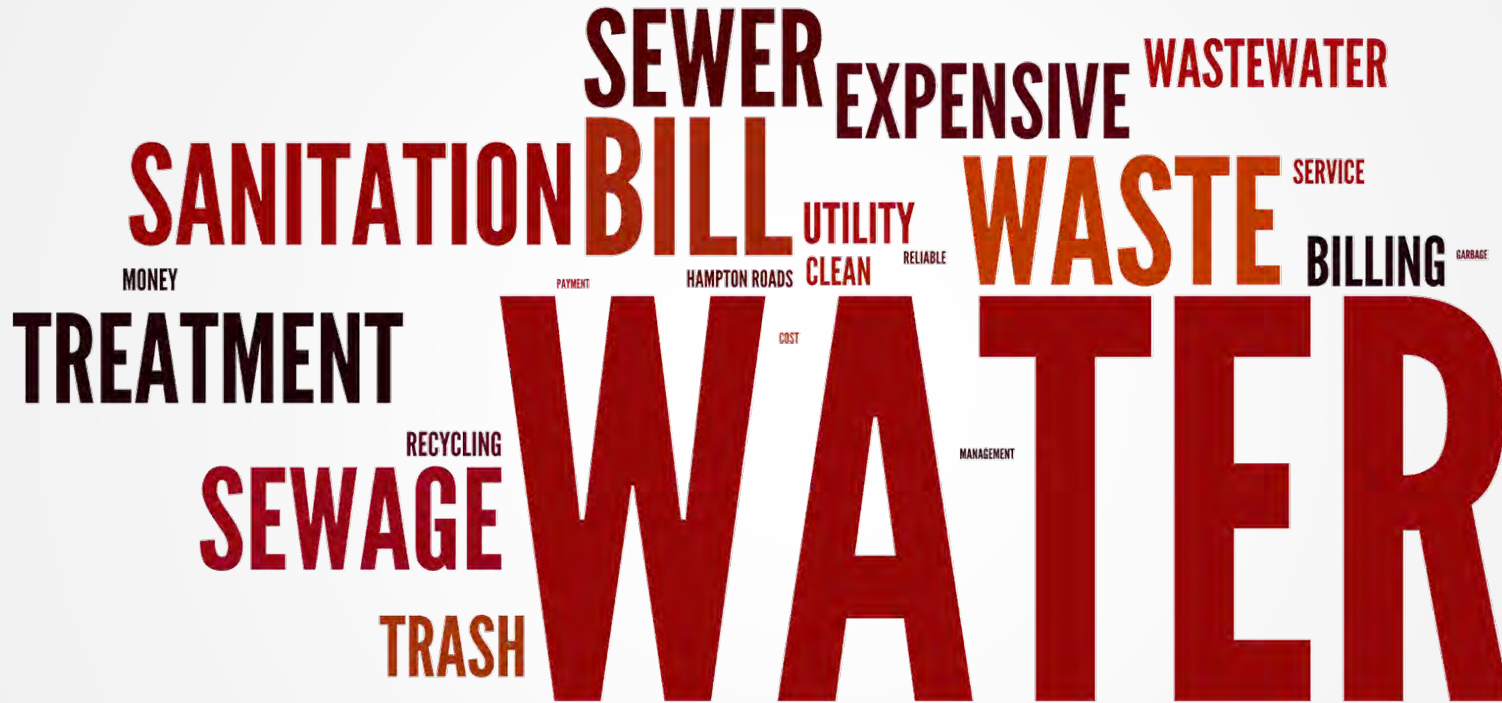




**III.  
Detailed  
Findings**

# Water dominates top of mind words related to HRSD

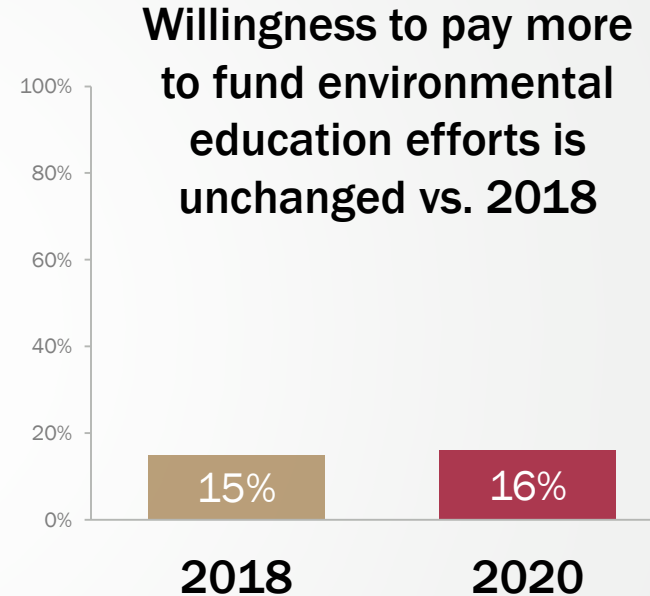
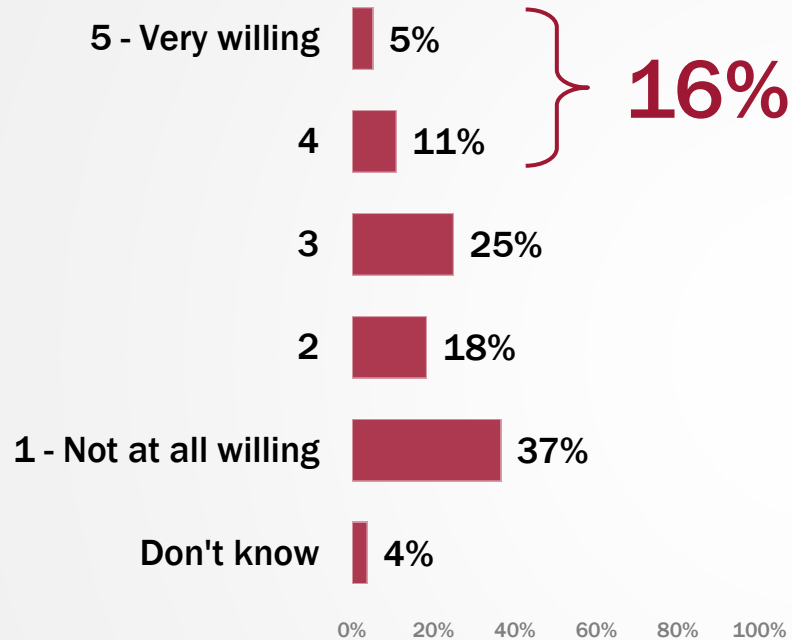
Trash and recycling, while less frequent, are also associated with HRSD



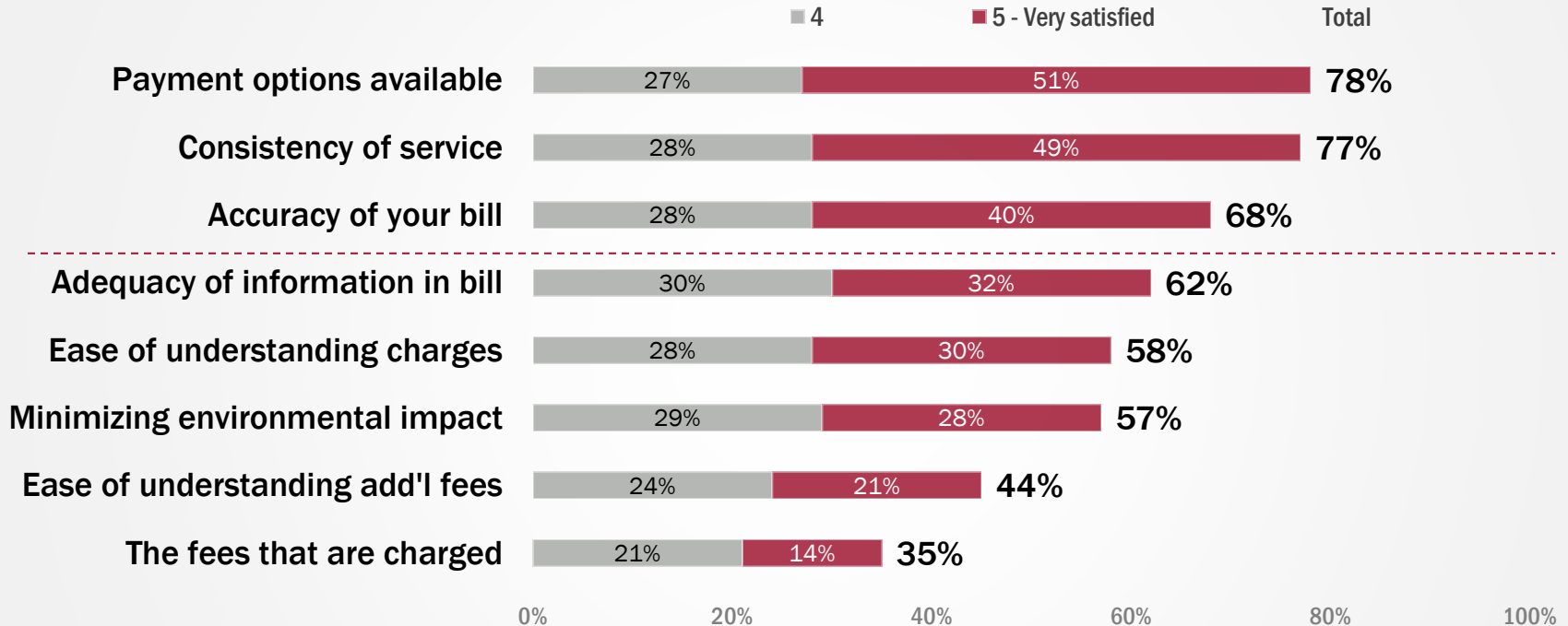
# Top of mind words related to HRSD in 2020 were consistent with those in 2018



# Only 16% of customers are willing to pay more for any utility to fund ENVIRONMENTAL EDUCATION EFFORTS



# HRSD **SATISFACTION** scores are good on the basics, but need to improve on communicating key information



Q14. How satisfied are you with the following aspects of HRSD wastewater services and billing?  
BASE: those who receive bills, Q12

n = 2,155



# HRSD billing customers have significantly higher **SATISFACTION** scores than HRUBS billing customers on all attributes

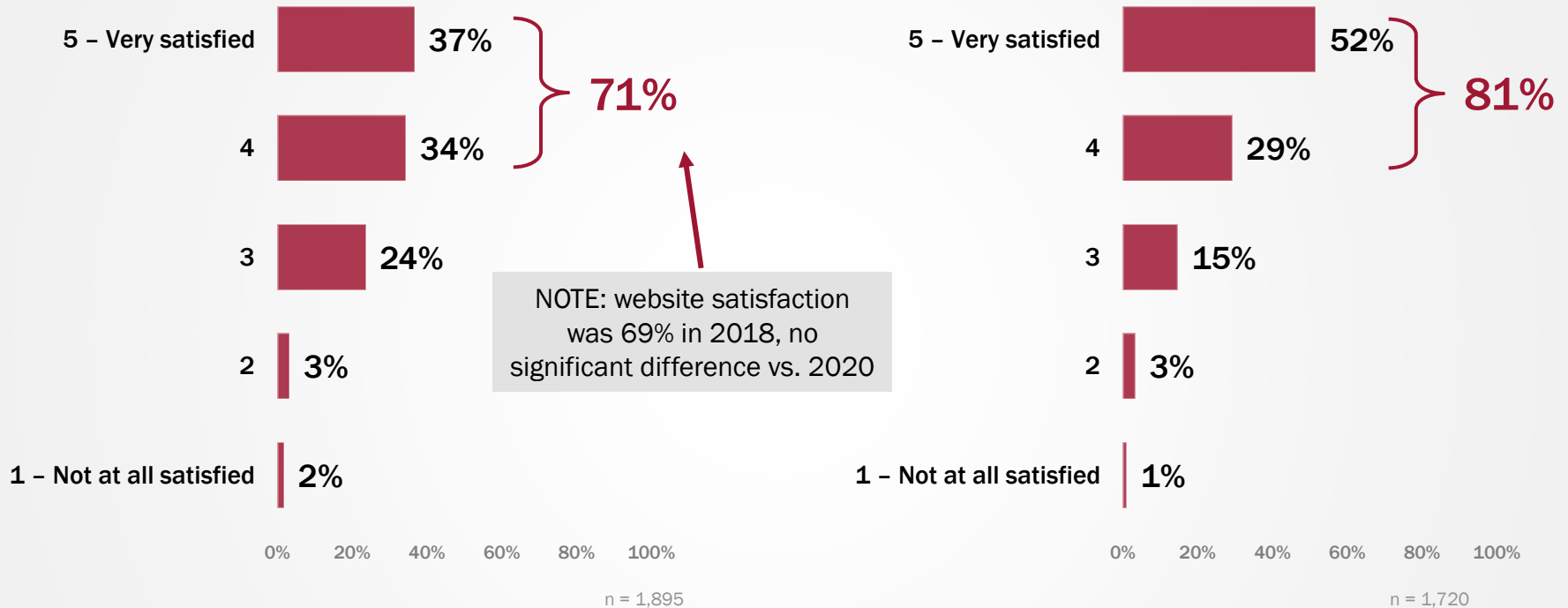
ISSUE (Scores of 4 or 5 Total)	HRSD BILLING RESPONDENTS	HRUBS BILLING RESPONDENTS
The payment options available	80%	76%
The fees that are charged	41%	29%
The ease of understanding your utility charges	63%	51%
The ease of understanding the additional fees	50%	36%
The consistency of service	79%	74%
The adequacy of information included in your bill	66%	56%
The accuracy of your bill	73%	61%
Minimizing environmental impact of wastewater treatment	62%	50%

Statistically higher,  
95% confidence

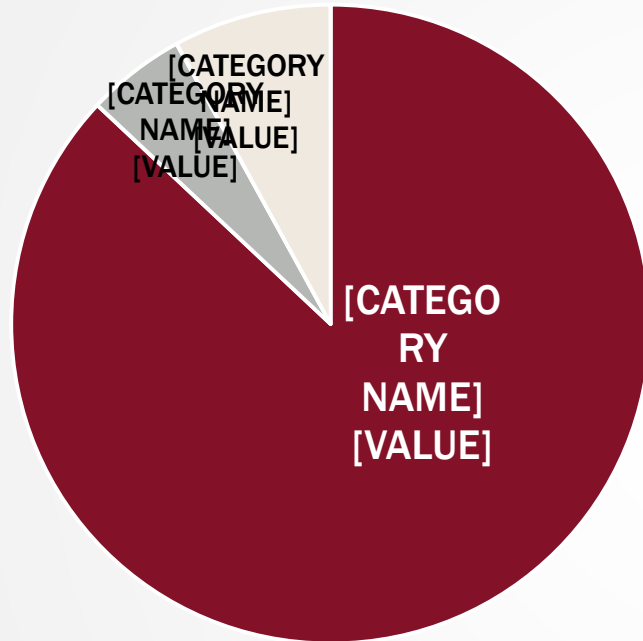
HRSD n = 1,266  
HRUBS n = 889



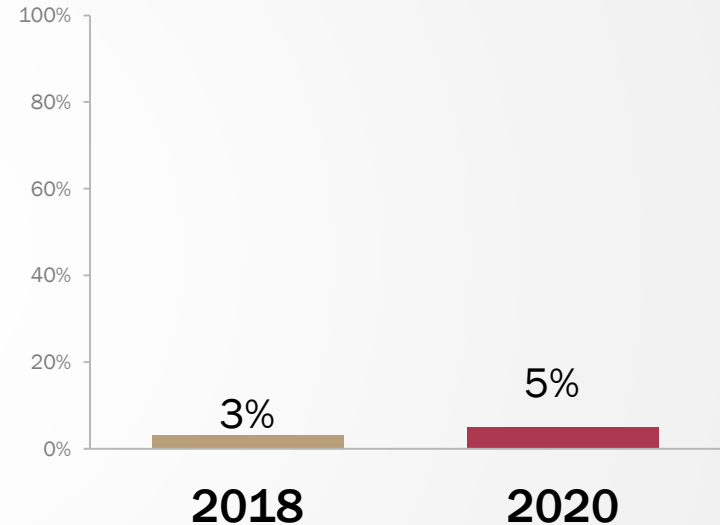
# Satisfaction with the site continues to be strong overall, especially among those using the site to view and pay their bill



# While awareness of the SWIFT project has increased slightly since 2018, it remains very low

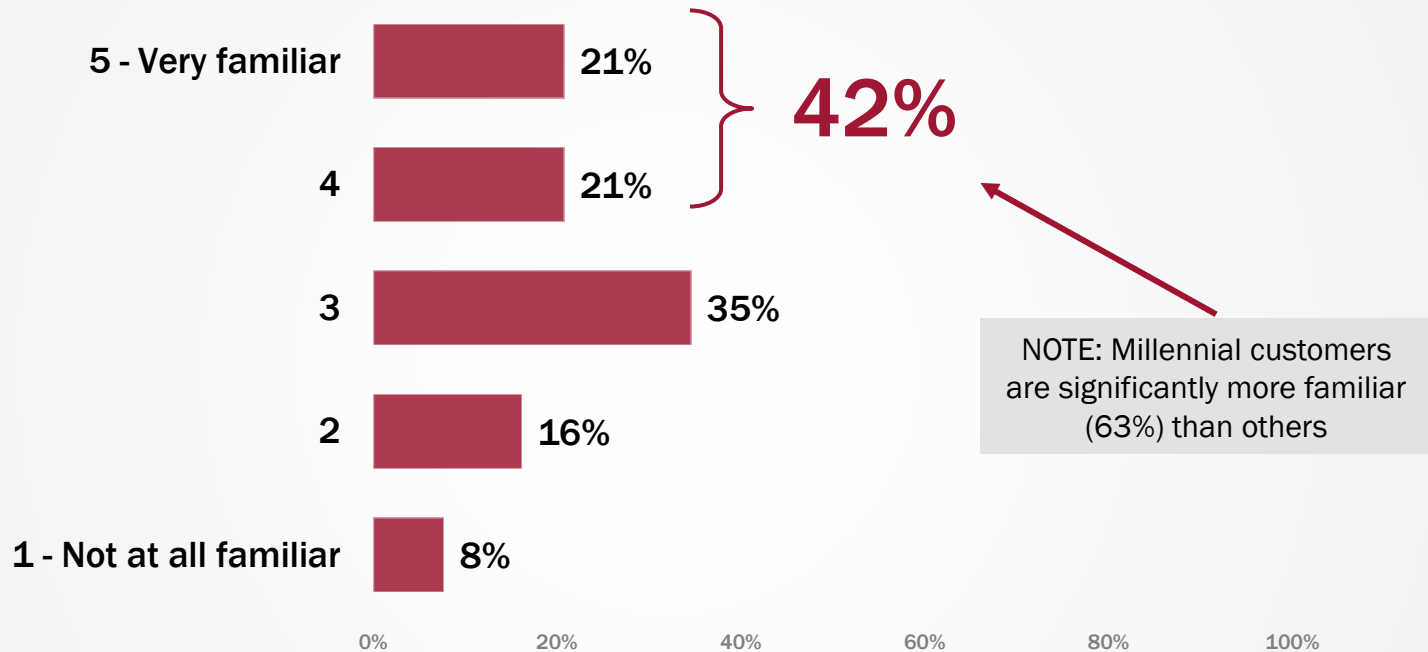


## SWIFT awareness

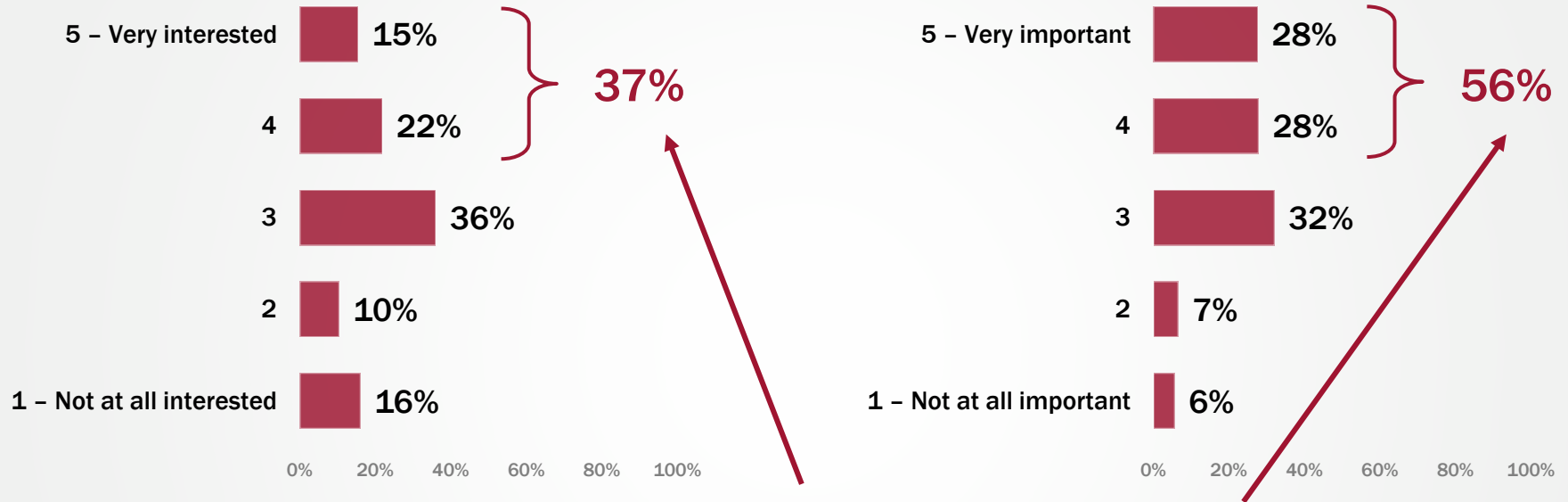




# Self-reported **FAMILIARITY** with SWIFT is low among those aware of the project



# Only one in three express strong interest in SWIFT, but more than half think the project is important, especially Boomers



NOTE: Boomers were slightly more interested in SWIFT (45%) and feel SWIFT is more important (62%)

ALSO: There was no change in interest in SWIFT or importance of SWIFT in 2020 compared to 2018

n = 2,784



HRSD Commission Meeting Minutes

November 24, 2020

Attachment 4

AGENDA ITEM 5. – November 24, 2020

**Subject:** New Positions in Operations Department - Plant Operators

[Presentation](#)



Plant Operator (PO)  
Commission Presentation  
November 24, 2020

- Treatment requirements and expectations are becoming more complex and interrelated and demanding by
  - Demands of rigorous treatment; and
  - A trend toward operational complexity over capital/resource intensity
- Successful operators must transition from collecting samples and recording data to distilling information at a more executive level
- A good operator
  - understands complex processes
  - makes good decisions
  - understands priorities
  - troubleshoots solutions
  - asks questions and calls for help at the right time.

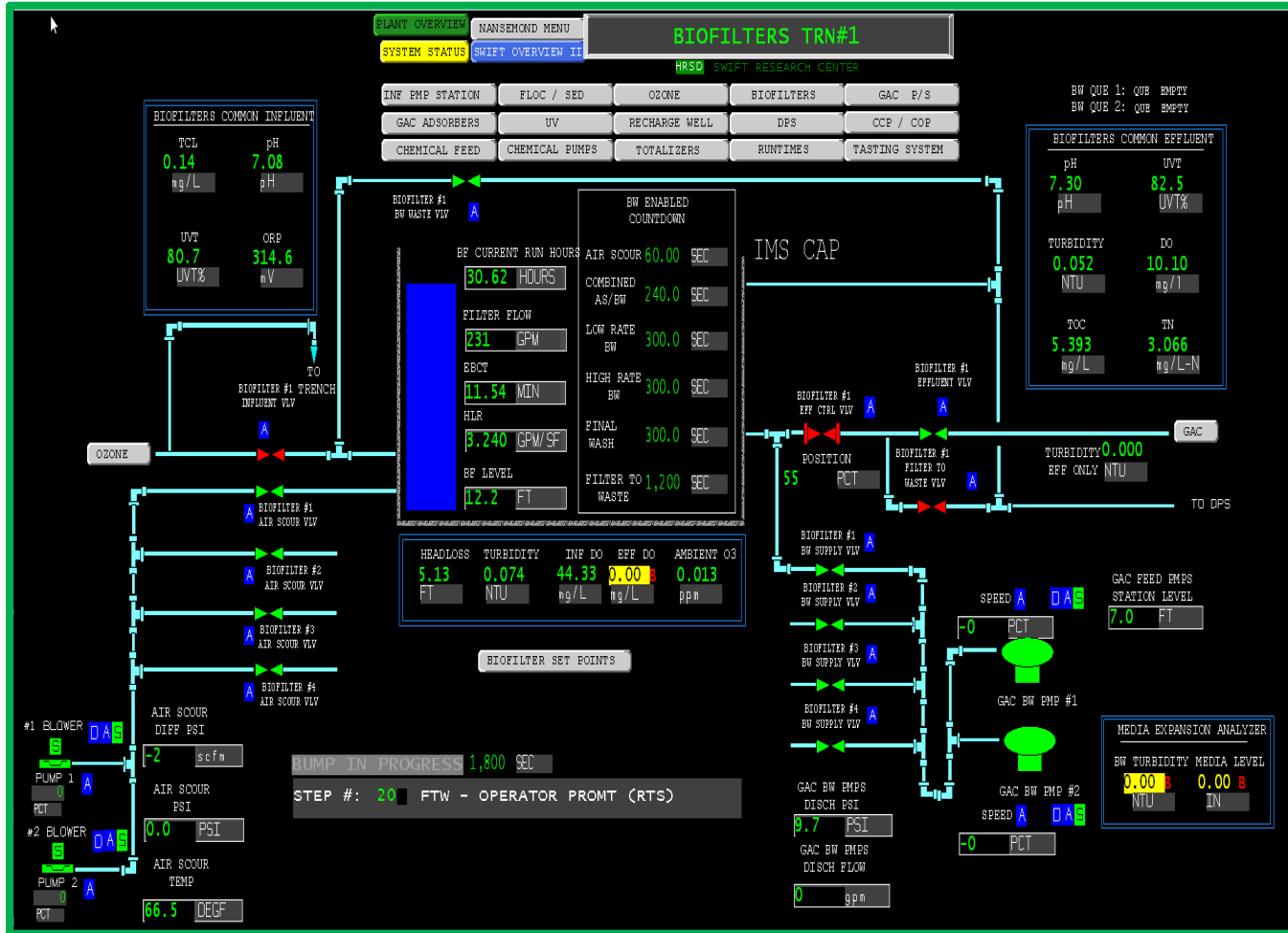
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## Changes to Apprentices Program

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- Expanding existing classes to emphasize use of computers and tools and expanding technical demands
- Addition of
  - **Capstone Review Course** to prepare PO for Class 1 and 2 Licensing Exams
  - **EDS, DCS, and Control Systems Course** to cover
    - Structure of data management to include regulatory and control systems
    - Structure of the DCS and introduction DCS functionality and EDS trending and capabilities
    - Control systems theory to include implementation of control systems (level control, DO control, supplemental carbon control)
  - **Plant Operator Tools of the Trade Class** to cover management, safety, Clean Water Act, permits, pretreatment, pollution, and prevention (necessary for licensing exam)
  - **Advanced Water Treatment & Reuse Class** - SWIFT process

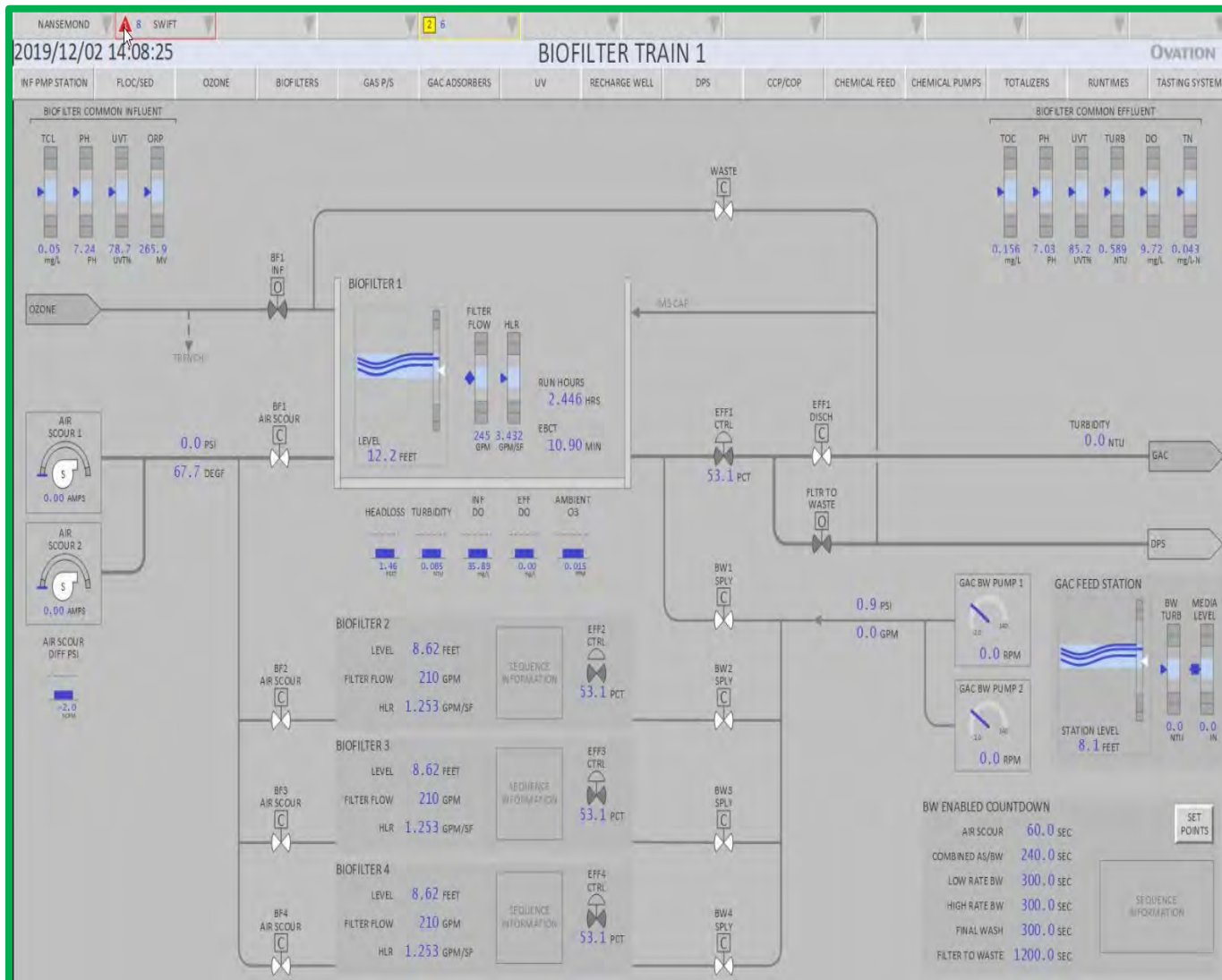
# High Performance Graphics (HPG) - Traditional Graphics



- Hierarchical based system
- P&ID based diagram
- High contrast – color saturated
- Animated graphic objects
- Animated alarms
- Instantaneous number values
- Reliance on Operator to mentally process number values
- Customized graphics for each process



# Potential HPG Screen



- Contextualized data
- Abnormal conditions stand out
- Distinguish between alarms and alerts
- Reduces critical alarm frequency to less than 10 per hour
- Color is minimized
- Optimized for color blindness
- HRSD-wide standardization

## Why HPG? - Case Study

- Increasing integration of automation & complexity of operations
- Improves reaction speed
- Improves troubleshooting speed
- Reduces training time
- Reduces operator stress

Task	Traditional	HPG	Improvement
Detecting abnormalities before alarm	10%	48%	5x increase
Troubleshooting success rate	70%	96%	36% increase
Time to solve issue	18.1 min	10.6 min	41% reduction

Nova Chem and ASM Consortium (Alberta, Canada)

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## Current Shift Operations

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- “Shift” vs. “Day” Operators
  - “Shift” Operator roles consist of monitoring plant operations and collecting and analyzing samples
  - “Day” Operator roles allow for
    - cross-training
    - higher-level functioning
    - maintenance and sensor calibration functions
- Shift Operators rotate day, night, evening and weekend shift duties
- Current shift schedule when fully staffed
  - 1 week evenings
  - 1 week nights
  - 1 week day shift
  - 5 – days off
- Until pandemic and virtualization of the PO Apprentice trade, shift schedule and evening courses were in constant conflict

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## Challenges with Current Operation

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- Frequent Rotation
  - Hampers retention and employee satisfaction
  - Disrupts employee's ability to adjust to changing work and sleep schedules
  - Limits ability to enhance operator skills since most training occurs during normal day hours
  - Isolates PO from work center and HRSD functions

## Recommendations

- Recommendations
  - Eliminate informal “Day” Operator position increasing operators in shift pool
  - Establish staffing levels sufficient to create a 6-week rotation at VIP, AB, BH and 7 weeks for other plants

Shift/ Duties	Current	Recommendations	
		4-week Rotation	6-week Rotation
Evenings	1	1	1
Nights	1	1	1
Day Shift	1	1	1
5-Days Off	1	1	1
Day Operator	0	2	3

## Recommendations Continued - Staffing Levels

TP	Current PO #	Requested New Positions	1-3 Years	3-5 Years	Net	Comments
AT	10	2	-5		7	DCS Upgrades/1 Operator on shift
BH	10	2		-12	0	Closure end of 2026
NP	7				7	
AB	10		-3		7	Incinerator closure
CE	10		-10		0	Closure end of 2021
VIP	10	2			12	
JR	6	1			7	
WB	7				7	
YR	7				7	
Totals	77	7	-18	-12	54	

*Other than JR, excludes POs necessary to support SWIFT plant expansions*

## Recommendations Continued – Budgetary Impact

- Add 7 new operators to staffing complement January 1, 2021
- Annual budget impact
  - To be absorbed in current FY 21 budget

	Per Position	Total	FY 21 Impact	% 21 Budget
Salaries	\$41,865	\$293,055	\$146,528	
Benefits	18,427	128,989	64,495	
Total	\$60,292	\$422,044	\$211,023	0.19%

HRSD Commission Meeting Minutes

November 24, 2020

Attachment 5

AGENDA ITEM 12. – November 24, 2020

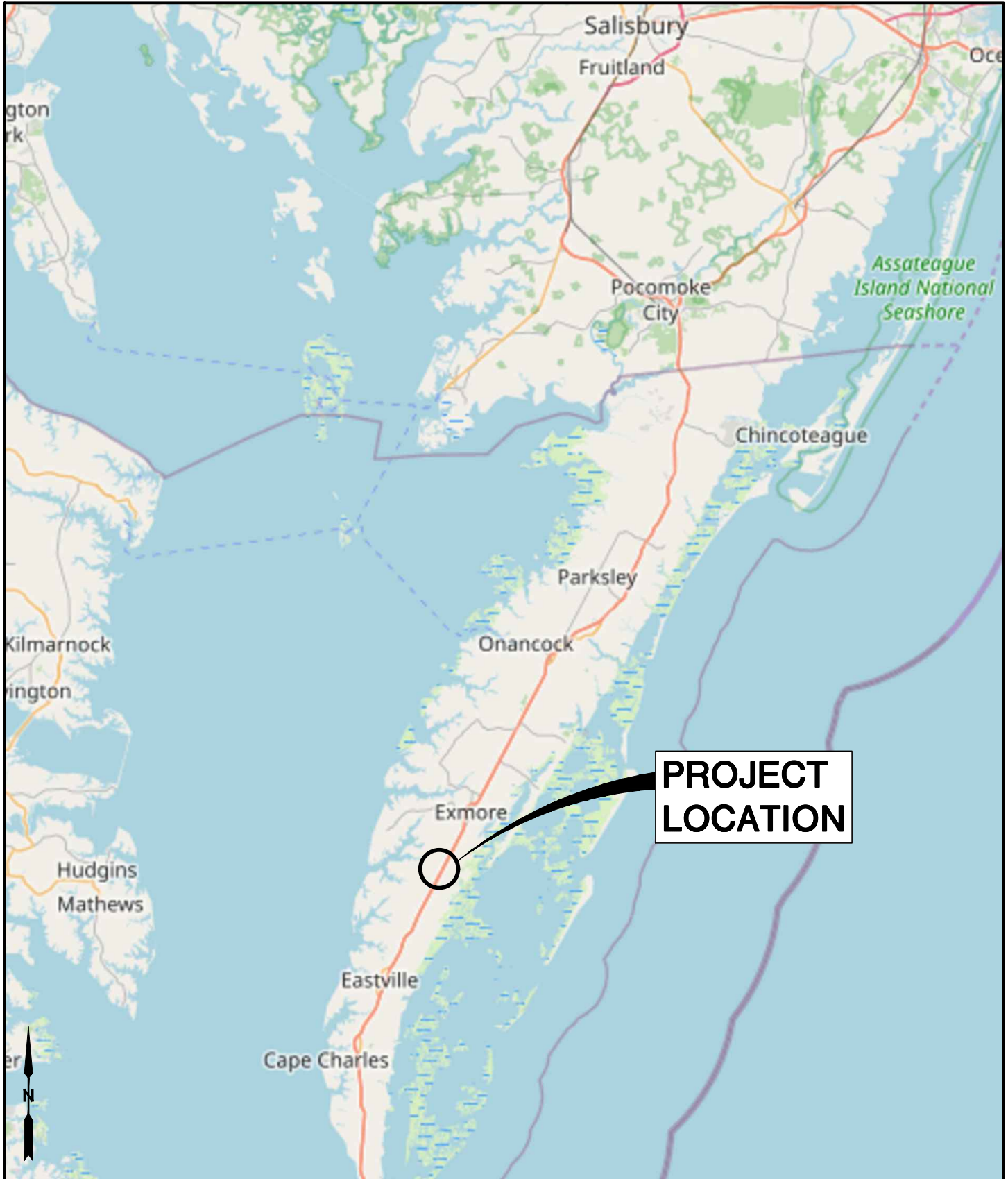
Nassawadox Treatment Plant Ownership Transfer Agreement with Shore Health Services, Inc.

\* [Maps](#)

\* [Agreement](#)

\* [Amendment dated 06/26/2023](#)





**FIGURE 1**



**DAVIS,  
BOWEN &  
FRIEDEL, INC.** ARCHITECTS ENGINEERS SURVEYORS

SALISBURY, MARYLAND (410) 543-9091  
MILFORD, DELAWARE (302) 424-1441  
EASTON, MARYLAND (410) 770-4744

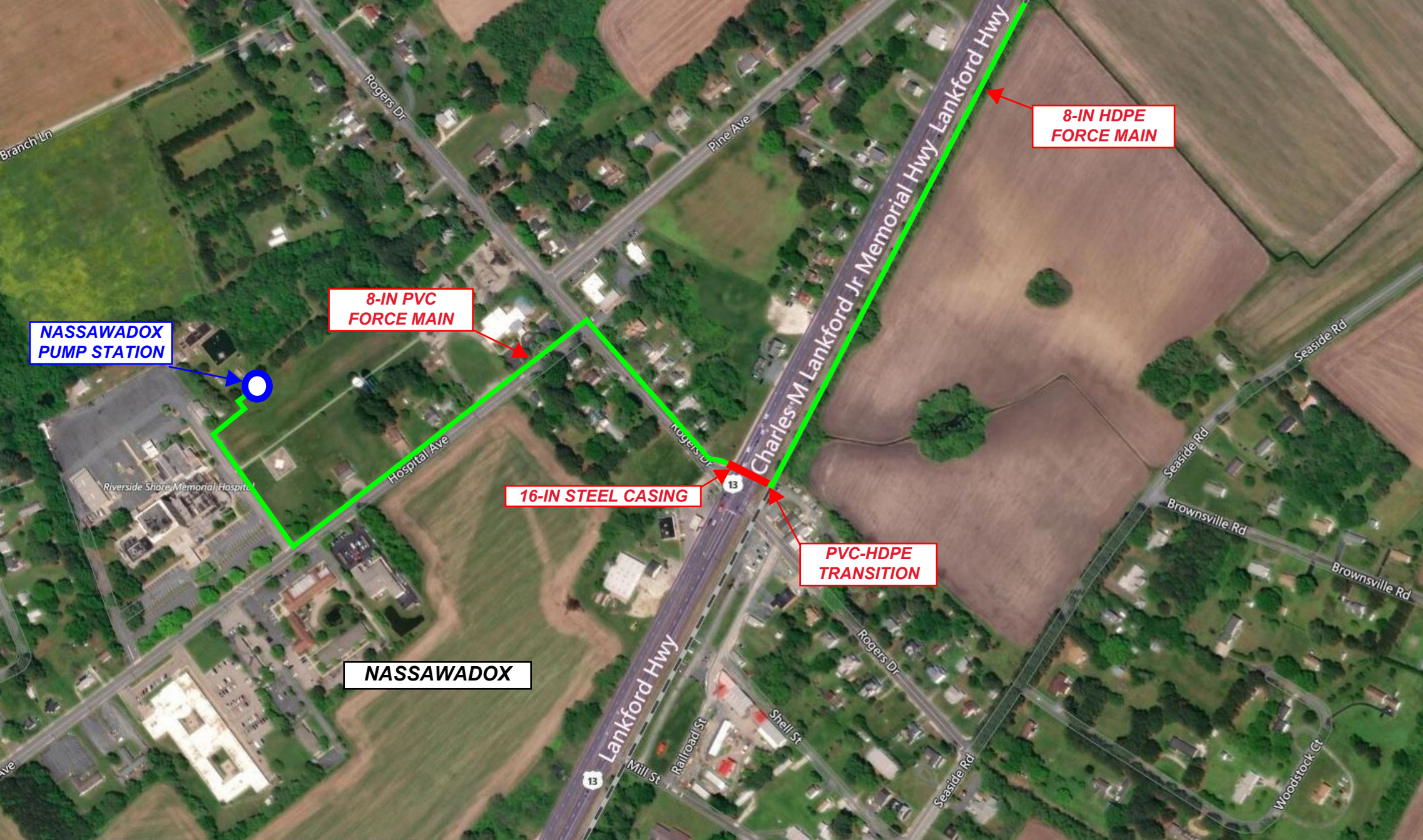
**VICINITY MAP**

**NASSAWADOX WWTP UPGRADE  
NORTHAMPTON COUNTY, VIRGINIA**

Date: **APRIL 2020**

Scale: **1"=10 MILES**

Proj.No.: **3226A003.B01**



**NASSAWADOX  
PUMP STATION**

**8-IN PVC  
FORCE MAIN**

**16-IN STEEL CASING**

**8-IN HDPE  
FORCE MAIN**

**PVC-HDPE  
TRANSITION**

**NASSAWADOX**

Branch Ln

Rogers Dr

Pine Ave

Hospital Ave

Rogers Dr

Lankford Hwy

Charles M Lankford Jr Memorial Hwy Lankford Hwy

Seaside Rd

Seaside Rd

Brownsville Rd

Brownsville Rd

Rogers Dr

Mill St

Railroad St

Shell St

Seaside Rd

Woodstock Ct

13

13

Riverside Shore Memorial Hospital

## NASSAWADOX TREATMENT PLANT – OWNERSHIP TRANSFER AGREEMENT

This AGREEMENT, made on this 10<sup>th</sup> day of March by and between Shore Health Services, Inc. d/b/a Riverside Shore Memorial Hospital, hereinafter referred to as “RIVERSIDE”, and the Hampton Roads Sanitation District, a political subdivision of the Commonwealth of Virginia, hereinafter referred to as “HRSD.”

### BACKGROUND

1. RIVERSIDE owns and operates the Nassawadox Wastewater Treatment Plant in Northampton County, Virginia. The plant was constructed to serve the former Northampton-Accomack Memorial Hospital and surrounding facilities in Nassawadox. RIVERSIDE has built a new regional medical center in Onley, Virginia and the former Northampton-Accomack Memorial Hospital is no longer in use.
2. Multiple other facilities located in Nassawadox remain in use and in need of centralized wastewater treatment services provided by the Nassawadox Wastewater Treatment Plant.
3. On October 2, 2020, the Northampton County Circuit Court ordered the territory included within the Hampton Roads Sanitation District to be expanded to include Northampton County and all towns within the County.

### AGREEMENT

That for and in consideration of Ten and 00/100 Dollars, and other good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows;

1. RIVERSIDE agrees to convey by special warranty deed, with English covenants of title, which shall be delivered as herein provided, and HRSD agrees to accept all real property, improvements thereon and fixtures thereto attached owned by RIVERSIDE that pertain to the Nassawadox Wastewater Treatment Plant, as of the date of this agreement, including but not limited to the Nassawadox Wastewater Treatment Plant, and all associated wastewater collection systems, pumping stations and appurtenances, together with all easements, highway permits and all rights including rights for installation, operation, maintenance, repair, relocation, renewal of, and access to, gravity sewers and force mains

that lie either within or without public streets or public places of rights of way. All of the foregoing properties, real and personal, are referred to herein as the "FACILITIES" as shown on the Plat of Subdivision Creating Utility Parcel on the Property of Shore Health Services (Instrument 210000050 recorded in the Clerk's Office of Northampton County Circuit Court on January 8, 2021 attached hereto as Exhibit A.)

2. Title to the FACILITIES shall be marketable and free and clear of any lien or encumbrance which, in the judgment of HRSD, has a materially adverse effect upon the right of HRSD to use such lands or property in the performance of the functions of HRSD or would preclude HRSD from obtaining owners title insurance insuring over any such lien or encumbrance which in the judgment of HRSD would have a materially adverse impact on the FACILITIES at reasonable rates. The FACILITIES shall be transferred to HRSD "AS IS".
3. RIVERSIDE currently operates the FACILITIES. Upon transfer of ownership in accordance with the provisions herein, RIVERSIDE agrees to continue to operate the FACILITIES as they have been historically operated; in strict compliance with all applicable health and regulatory requirements, including, without limitation, the permit and regulatory requirements of the Virginia State Department of Health and the Virginia Department of Environmental Quality. RIVERSIDE shall continue to operate and maintain the FACILITIES in a good and workman like manner on a full-time basis throughout the term of this Agreement; and Riverside, its employees, contractors, invitees, and agents shall have a license to enter and occupy.
4. RIVERSIDE will provide operation and maintenance services to HRSD as an independent contractor. The means, methods and execution of its operation and maintenance activities shall be determined by RIVERSIDE. RIVERSIDE will consult and take direction from HRSD when warranted.
5. RIVERSIDE shall provide monthly and annual reports providing financial and operating statistics regarding the FACILITIES under this Agreement to HRSD .
6. RIVERSIDE shall be responsible for all costs associated with routine maintenance and operations. Replacement of equipment and components, major repairs and other investments in excess of \$2,500.00, required to keep the FACILITIES fully operational in accordance with all applicable laws and regulations, not due to the gross negligence of RIVERSIDE, shall be the responsibility of HRSD.

7. RIVERSIDE shall be responsible for reimbursing HRSD for any fines or penalties levied upon HRSD as the result of gross negligent operation of the FACILITIES or non-compliance with this Agreement.
8. Included within the operational and maintenance responsibilities hereunder, RIVERSIDE specifically shall (a) maintain the System, to the best of their ability, to standards promulgated by the Virginia Department of Environmental Quality and Virginia Department of Health, (b) prepare and deliver all reports required by the responsible regulatory agencies; (c) ensure that maintenance, other than routine day-to-day efforts, will be accomplished on an event-by-event basis in consultation with HRSD; and (d) provide HRSD with 24-hour availability.
9. RIVERSIDE will perform the necessary treatment control testing and obtain the required samples and send samples to a contracted laboratory for all regular laboratory tests and report the results to cognizant regulatory agencies.
10. RIVERSIDE shall continue to bill and collect payment for service to customers connected to the FACILITIES as of the date of this Agreement. All monies collected shall be RIVERSIDE'S. Upon termination of this Agreement, RIVERSIDE shall provide all billing records and detailed customer information in a form and manner acceptable to HRSD for transfer of billing and collection services to HRSD.
11. HRSD shall provide all necessary easements, permits or rights-of-way to permit the RIVERSIDE and its personnel to have operational and maintenance access to the FACILITIES.
12. HRSD shall be listed as the Owner of the System and shall continue all responsibilities as an Owner under permits, licenses and approvals issued by the responsible regulatory authorities.
13. HRSD shall provide technical assistance and consultation for any unusual operating conditions, including system and/or component failures, permit exceedances and similar non-typical operating issues encountered by RIVERSIDE.
14. HRSD shall provide operation and maintenance services when RIVERSIDE is unable to meet these requirements for up to 36 days every 12-months without compensation. RIVERSIDE agrees to pay HRSD \$500 per day for each additional day during any 12-month period. Provided however, if the plant operator employed by RIVERSIDE terminates his employment with Riverside during the term of this Agreement, HRSD shall provide

operation and maintenance services for the FACILITIES until such time as a replacement operator can be hired and the \$500 per day additional charge shall not be applicable.

15. This Agreement shall be effective upon conveyance of the FACILITIES to HRSD and remain in effect through June 30, 2023 or until such time as HRSD completes the Eastern Shore Force Main and eliminates all flow to the treatment FACILITIES, whichever comes first.
16. Mutual Cooperation. The Parties shall continue to cooperate with each other in any manner reasonably necessary to confirm or bring about the transfer of the FACILITIES as provided herein.
17. No Assignment. RIVERSIDE shall not transfer or assign this Agreement, or its rights or obligations hereunder, without the prior written consent of HRSD, which consent may be withheld in HRSD's sole discretion.
18. No Third-Party Beneficiaries. This Agreement is solely for the benefit of the Parties hereto and their permitted successors and assignees and shall not confer any rights or benefits on any other person.
19. Expenses. Each Party shall pay its own fees and expenses, including its own counsel fees, incurred in connection with this Agreement.
20. Brokerage Commissions. The Parties represent and warrant to each other that they have not dealt with any business broker or agent who would be entitled to a brokerage commission or finder's fee as a result of this Agreement or any related transactions. Each Party agrees, to the extent permitted under law and without waiving sovereign immunity, to indemnify and hold the other harmless from any and all claims for commissions of broker's or finder's fees claiming by, through or under the indemnifying Party, including any losses related to any such claim.
21. Notices. All notices, requests, demands, claims and other communications hereunder shall be in writing, shall be delivered in person or by mail (first class postage pre-paid), or overnight delivery and shall be deemed given when delivered in person or, if not delivered in person, when received (or delivery is refused) by the Party to whom such notice, request, demand, claim or other communication is directed, at the following address, or at such other address as a Party shall designate by written notice to the other Party:

If to RIVERSIDE: by mail: Attention: General Counsel

Riverside Health System

701 Town Center Drive, Suite 1000

Newport News, VA 23606

With a copy to the President of Shore Memorial Hospital at the same address.

By electronic means: john.peterman@rivhs.com

If to HRSD:

General Manager

Hampton Roads Sanitation District

1434 Air Rail Avenue

Virginia Beach, VA 23455-3002

with a copy to the Director of Water Quality at the same address.

By electronic means: EHENIFIA@HRSD.COM

22. Governing Law; Venue; Severability. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the Commonwealth of Virginia. This Agreement is a Virginia contract deemed executed and accepted in the City of Virginia Beach; and all questions with respect to any of its provisions shall be instituted, maintained, and contested in a court of competent jurisdiction in the City of Virginia Beach, Virginia or the U.S. District Court for the Eastern District of Virginia, Norfolk Division. If any word or provision of this Agreement as applied to any Party or to any circumstance is adjudged by a court to be invalid or unenforceable, the same shall in no way affect any other circumstance or the validity or enforceability of any other word or provision.
23. No Waiver. Neither any failure to exercise or any delay in exercising any right, power or privilege under this Agreement by either Party shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege hereunder preclude the exercise of any


other right, power or privilege. No waiver of any breach of any provision shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision, nor shall any waiver be implied from any course of dealing.

24. Entire Agreement; Amendments. This Agreement contains the entire agreement between the Parties as to the subject matter hereof and supersedes all previous written and oral negotiations, commitments, proposals and writings. No amendments may be made to this Agreement except by a writing signed by both Parties.
25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument. The Parties further agree that a facsimile, scanned or electronic signature may substitute for and have the same legal effect as an original signature, and that any copy of this executed Agreement made by photocopy, facsimile or scanner shall be considered an original.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be signed by their duly authorized officers as of the day, month and year first above written.

RIVERSIDE

By



HRSD

By





**FIRST AMENDMENT TO  
NASSAWADOX TREATMENT PLANT - OWNERSHIP TRANSFER AGREEMENT**

**THIS FIRST AMENDMENT TO THE NASSAWADOX TREATMENT PLANT - OWNERSHIP TRANSFER AGREEMENT** (the “Amendment”) is effective as of June 26, 2023, by and between the Hampton Roads Sanitation District, a political subdivision of the Commonwealth of Virginia (“HRSD”), and Shore Health Services, Inc. d/b/a Riverside Shore Memorial Hospital (“Riverside”).

**WHEREAS**, HRSD and Riverside are parties to that certain Nassawadox Treatment Plant Ownership Transfer Agreement dated March 10, 2021 (the “Original Agreement”), pursuant to which Riverside will transfer the wastewater treatment facility and operations to HRSD;

**WHEREAS**, HRSD and Riverside desire to amend the Original Agreement on the terms and conditions set forth herein.

**NOW, THEREFORE**, in consideration of the mutual covenants and promises herein contained and intending to be legally bound hereby, the parties covenant and agree as follows:

1. **Incorporation of Recitals; Undefined Terms.** The recitals set forth above are hereby incorporated herein by this reference. All capitalized terms used herein without definition shall have the same meanings given to such terms in the Original Agreement. The Original Agreement as amended hereby is hereinafter referred to as the “Agreement.”

2. **Purchase and Sale of Equipment.** Section 15 of the Original Agreement is hereby deleted and replaced with the following Section 15:

This Agreement shall be effective upon conveyance of the FACILITIES to HRSD and remain in effect through September 30, 2023, or until such time as HRSD completes the Eastern Shore Force Main and eliminates all flow to the treatment FACILITIES, whichever comes first.

3. **Binding Effect.** This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

4. **Entire Agreement.** This Amendment and the Original Agreement are the entire agreement between the parties hereto regarding the matters described herein and there are no other terms, covenants, conditions, agreements, or representations or warranties, oral or otherwise with respect thereto, of any kind whatsoever.

5. **No Other Modifications; Ratification; Conflicts.** Except as expressly amended hereby, the Original Agreement remains unmodified and in full force and effect. In the event of a conflict between the terms of this Amendment and the Original Agreement, the terms of this Amendment shall control.

6. **Governing Law; Counterparts.** This Amendment shall be governed by the laws of the Commonwealth of Virginia. This Amendment may be executed in counterparts, each of which shall be an original and all of which, when taken together, shall constitute but one and the same instrument. This Amendment may be signed and delivered electronically, and the electronic record and signature will constitute an original for all purposes.

**IN WITNESS WHEREOF**, the parties hereto have executed this Amendment as of the day and year first above written.

**HRSD:**

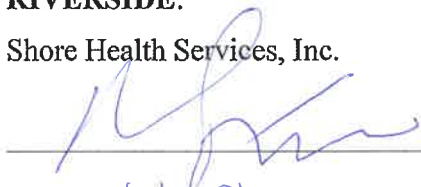
Hampton Roads Sanitation District

  
\_\_\_\_\_  
Jay A. Bernas, P.E.  
General Manager

6/26/2023  
\_\_\_\_\_  
Date

**RIVERSIDE:**

Shore Health Services, Inc.

  
\_\_\_\_\_  
Name: Nick Chuguin  
Title: President, RSMH

6/29/23  
\_\_\_\_\_  
Date

AGENDA ITEM 13. – November 24, 2020

**Subject:** Town of Onancock Wastewater Treatment Services Agreement

**TOWN OF ONANCOCK WASTEWATER TREATMENT  
SERVICES AGREEMENT WITH HAMPTON ROADS  
SANITATION DISTRICT**

THIS AGREEMENT is made this 6<sup>th</sup> day of January, 2021, by and between HAMPTON ROADS SANITATION DISTRICT, hereinafter referred to as "HRSD," and the TOWN OF ONANCOCK, VIRGINIA, hereinafter referred to as "Onancock."

WHEREAS, Onancock owns and operates the Onancock Wastewater Treatment Plant, hereinafter referred to as the "WWTP" and

WHEREAS, HRSD and Onancock have expressed the intention of entering into negotiations for the eventual sale of WWTP from Onancock to HRSD upon such terms and conditions as may hereinafter be determined, and

WHEREAS, until such time as an agreement may be reached regarding such sale, HRSD has requested that Onancock provide wastewater treatment services for a portion of HRSD's wastewater flows located in Northampton and Accomack Counties, and Onancock agrees to provide such services under terms and conditions hereinafter set forth,

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: that for and in consideration of the premises and the mutual covenants and undertakings of the parties to this Agreement, the parties mutually agree with each other as follows:

1. Onancock agrees to accept and treat an average daily flow not to exceed two hundred fifty thousand gallons per day (0.25 MGD), to be calculated on a rolling 12 month average, and a peak flow not to exceed five hundred thousand gallons per day (0.5 MGD), to be calculated on a rolling 12 month basis.

2. As soon as practicable, after execution hereof, HRSD shall construct at its sole expense such wastewater system as is necessary to provide wastewater service in the

HRSD service territory and to convey a portion of said wastewater to Onancock's WWTP. HRSD shall, likewise, install, at no expense to Onancock, a wastewater billing meter that measures the amount of wastewater delivered by HRSD to Onancock's WWTP for treatment. HRSD shall maintain, repair, operate and manage the foregoing at its sole expense.

3. Upon completion of the items set forth on Paragraph 2 above, Onancock will, at a mutually agreed upon connection point, accept wastewater originating in the HRSD service territory at the WWTP for treatment and disposal.

4. Onancock shall have the right to inspect HRSD's billing meter provided reasonable notice is provided. HRSD shall have the billing meter calibrated no less than once every six (6) months and provide Onancock with documentation of such calibrations, if requested. HRSD shall read the meter no more than 7 days after the last day of the preceding month.

5. Wholesale Treatment Charge: HRSD shall pay Onancock \$18.73 per 1000 gallons, or the lowest published rate set by Onancock Town Council, delivered to the Onancock Treatment Plant as measured by the meter described in Paragraph 4 above. Payment shall be made within 30 days from date of the meter read, without demand. Provided, however that a minimum per day payment shall be due for 150,000 gallons (\$2,809.50) regardless of actual usage.

6. One-time Capacity Charge: Within 30 days after HRSD begins to deliver flow to Onancock, HRSD shall pay Onancock a One-time Capacity Charge of \$140,475.00 for Onancock to guarantee exclusive dedication of capacity to HRSD of two hundred fifty thousand gallons per day (0.25 MGD) average day capacity and five hundred thousand gallons per day (0.5 MGD) peak day capacity in the WWTP.

7. If the wastewater delivered by HRSD for treatment by Onancock exceeds two hundred eighty-two (282) milligrams per liter BOD5 or two hundred sixty-one (261) milligrams per liter TSS on a weekly basis, HRSD shall undertake actions to lower the BOD5 or TSS of the wastewater delivered for treatment to be below these limits unless, Onancock

has agreed that these limits can be exceeded on a permanent or temporary basis.

8. HRSD shall prohibit the introduction of sewage into wastewater of a quality specifically inadmissible under any Town Ordinance of general applicability to all areas served by the WWTP.

9. HRSD shall provide any information Onancock needs for complying with the terms and conditions of the Virginia Pollutant Discharge Elimination system permit or any other permit issued for the WWTP that is now or may hereafter be in force. HRSD shall provide any information Onancock needs to respond to requests for information from state or federal regulatory agencies.

10. If operational problems or permit violations occur at the WWTP that are primarily the result of actions of HRSD or its customers, HRSD agrees to pay one-hundred (100%) of the costs associated with correcting said problems, addressing the permit violations, and/or paying any civil penalties or charges associated with the violations.

11. Neither Onancock nor HRSD shall be liable in damages to the other for any act, omission, or circumstance occasioned by or in consequence of any acts of God, acts of the public enemy, wars, epidemics, landslides, lightening, explosions, breakage or accident to machinery or lines of pipe, or any other cause, not reasonably within the control of the offending party and which by the exercise of due diligence such party is unable to prevent or overcome. Such causes or contingencies affecting the performance hereunder by either Onancock or HRSD shall not relieve either of liability in the event of its concurring negligence or in the event of its failure to use due diligence to remedy the situation and to remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting such performance relieve either party from its obligations to make payment of amounts then due hereunder in respect of wastewater theretofore received, disposed of or treated. Nothing contained in this section shall be construed as waiving any immunity which either party may possess.

12. This Agreement shall continue in full force and effect until terminated by mutual agreement of the parties in writing or until superseded by the transfer of ownership of the WWTP from Onancock to HRSD pursuant to a duly negotiated and executed Agreement of Sale between the parties.

13. The rights under this contract may be exercised by any successor or successors, assignee or assignees of either party when approved by the governing body of that jurisdiction or district, but such transfer shall not operate to relieve such governing body of any of its obligations under this contract. Written notice of intent to transfer shall be given to the other party at least ninety (90) days in advance of the transfer.

14. In the event either party fails to comply with a deadline set forth hereunder or otherwise is in default hereunder, the party that has failed to comply with such deadline or that otherwise is in default shall cure such default within thirty (30) days of receiving written notice of such default from the party not in default, or any such longer period to which the parties may agree in writing.


15. This agreement shall be governed by the laws of the Commonwealth of Virginia, and the venue for any dispute arising hereunder shall be in the Courts of the County of Accomack, Virginia.

IN WITNESS WHEREOF, Onancock and HRSD have caused this Agreement to be executed by their duly authorized officers.

**HAMPTON ROADS SANITATION DISTRICT**

  
\_\_\_\_\_  
General Manager

**TOWN OF ONANCOCK**

  
\_\_\_\_\_  
Town Manager

HRSD Commission Meeting Minutes

November 24, 2020

Attachment 6

AGENDA ITEM 14. – November 24, 2020

**Subject:** Lamberts Point – 4301 Powhatan Avenue, Norfolk, VA

Exercise of Option to Purchase Real Property

[Resolution](#)

[Agreement](#)





## RESOLUTION

### ***EXERCISE OF OPTION TO PURCHASE REAL PROPERTY LAMBERT'S POINT – 4301 POWHATAN AVENUE, NORFOLK, VA***

**WHEREAS**, on March 27, 2018, the Commission of the Hampton Roads Sanitation District (hereinafter "HRSD Commission") voted to approve the terms and conditions of an Option to Purchase Real Estate agreement with the City of Norfolk, Virginia (hereinafter "City"), granting to the Hampton Roads Sanitation District (hereinafter "HRSD") an option to purchase approximately thirty-five (35) acres of land currently used as a municipal golf course known as Lambert's Point Golf Course, 4301 Powhatan Avenue, Norfolk, Virginia, together with associated easements through adjacent City-owned property required for construction and utilities to serve the parcel (hereinafter "Property"), for the purpose of operating a consolidated SWIFT facility to provide advanced water treatment, and authorized the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary ("Option Agreement"); and

**WHEREAS**, the Option Agreement was executed on behalf of HRSD by the General Manager on March 29, 2018 and on behalf of the City on April 20, 2018; and

**WHEREAS**, the Option Agreement was amended by First Amendment to Option to Purchase Real Estate dated June 23, 2020 (hereinafter "First Amendment") to provide that HRSD may exercise its option to purchase the Property prior to January 1, 2023 on certain terms and conditions as set forth in the First Amendment (hereinafter the Option Agreement as amended by the First Amendment shall be referred to collectively as "Option Amendment"); and

**WHEREAS**, the HRSD Commission desires to exercise HRSD's option to purchase the Property and to close on its purchase on or before December 31, 2020, and to authorize the General Manager to take all necessary and appropriate action to conclude such purchase and transfer of title to the Property to HRSD, subject to the terms and conditions set forth in the Option Agreement, including without limitation the condition that the City shall not be required to terminate its lease and service agreement with GMI for Lambert's Point Golf Course until December 31, 2022, and the condition that the City and HRSD enter into an agreement to govern their roles as joint owners of Lambert's Point Golf Course; now, therefore, be it

**RESOLVED by the HRSD Commission**, that the HRSD Commission hereby exercises its option to purchase the Property and to close on such purchase on or before December 31, 2020, subject to the terms and conditions set forth in the Option Agreement, including without limitation the condition that the City shall not be required to terminate its lease and service agreement with GMI for Lambert's Point golf Course until December 31, 2022, and the condition that the City and HRSD enter into an

agreement to govern their roles as joint owners of Lambert's Point Golf Course; and be it

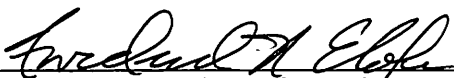
**RESOLVED FURTHER**, that the General Manager is hereby authorized and directed to take any and all necessary action to conclude such purchase and transfer of the Property to HRSD in accordance with the Option Agreement, including without limitation the negotiation and execution on behalf of HRSD of an agreement with the City to govern the roles of HRSD and the City as joint owners of Lambert's Point Golf Course; and be it

**RESOLVED FURTHER**, that the General Manager is hereby authorized and directed to take any and all such further and other action as reasonably needed in connection with the foregoing resolutions and the transactions referred to therein and to execute and deliver, as appropriate, any and all agreements, instruments, certificates and other documents in connection therewith, including, but not limited to, the agreements, instruments, certificates and other documents referred to in such resolutions (as conclusively evidenced by his execution and delivery thereof), all with such changes or additions thereto as he deems necessary or advisable (as conclusively evidenced by his execution and delivery thereof), and to take all such further and other action as deemed necessary or advisable in connection with the transactions contemplated by the foregoing resolutions; and be it

**RESOLVED FURTHER**, that the acts and doings of the General Manager, in respect to the subject matters indicated, and all of the prior acts and doings of said persons with respect thereto, and all agreements, written or oral and any and all instruments of any and every kind, nature or description whatsoever heretofore executed and delivered by or on behalf of HRSD in connection therewith, are hereby fully ratified, approved, adopted and confirmed, and declared to be and represent binding obligations of HRSD in accordance with the respective terms and provisions thereof.

*Adopted by the HRSD Commission on the 24<sup>th</sup> day of November, 2020.*

The undersigned further certifies that the foregoing has been properly approved and adopted in accordance with all applicable requirements of the HRSD Commission.

  
\_\_\_\_\_  
Frederick N. Eloffson, CPA, Chair

## OPTION TO PURCHASE REAL ESTATE

THIS OPTION TO PURCHASE REAL ESTATE (this "Agreement"), dated as of the 22<sup>nd</sup> day of April, 2018, is given by the **CITY OF NORFOLK**, a municipal corporation of the Commonwealth of Virginia (hereinafter called "City") to **HAMPTON ROADS SANITATION DISTRICT**, a political subdivision of the Commonwealth of Virginia (hereinafter called "HRSD").

### RECITALS

A. HRSD's Sustainable Water Initiative for Tomorrow ("SWIFT") Project was conceived with multiple benefits in mind for the Hampton Roads region. This innovative water purification project is designed to enhance the sustainability of the long-term groundwater supply and help address other environmental pressures such as sea level rise and saltwater intrusion. The SWIFT Project is intended to achieve these benefits by taking already-treated wastewater that would otherwise be discharged into the Chesapeake Bay watershed, purifying it through additional rounds of advanced water treatment to meet drinking water standards, and injecting the resulting drinking quality water into the Potomac aquifer deep underground. Most importantly, with respect to TMDL benefits, SWIFT will result in a significant reduction in the total volume of HRSD discharge to the Chesapeake Bay watershed, to achieve greater environmental benefits with corresponding significant reductions of TN, TP and TSS discharges to the Chesapeake Bay watershed.

B. HRSD and the City entered into the Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration ("Trading Agreement") on June 28, 2017. Pursuant to Virginia Code § 62.1-44.19:21 and § 62.1-44.19:21.1, the City may acquire and use TN, TP and TSS credits for purposes of compliance with the Chesapeake Bay TMDL loading reductions of its MS4 VSMP Permit, including credits generated by SWIFT. The Trading Agreement provides such credits for the City to meet its obligations to reduce TN, TP and TSS as required by its municipal separate stormwater sewer system ("MS4"). The MS4 is subject to the Chesapeake Bay TMDL as derived from the Virginia WIP and to a Virginia Stormwater Management Program (VSMP) Permit issued to the City by DEQ. As a result of the VSMP Permit, the City is required to develop and implement Chesapeake Bay and Local TMDL Action Plans. The credits provided by HRSD under the Trading Agreement will be used to assist the City with meeting the Chesapeake Bay TMDL pollutant reduction requirements for the Second and Third Bay TMDL Permit Cycle saving the City millions of dollars. The ability to generate TN, TP, and TSS credits through the SWIFT Project and apply those credits as progress under the Hampton Roads localities' MS4 Permits and associated TMDL Action Plans is a fundamental premise for the SWIFT Project. HRSD is proceeding with the SWIFT Project, and the City is supporting it, in large part in reliance on these critical water quality trading-based benefits.

C. SWIFT requires HRSD to construct advanced water treatment facilities to treat HRSD's highly treated wastewater effluent to meet drinking water standards prior to pumping that SWIFT Water into the ground. Ideally those facilities need to be in close proximity to existing HRSD facilities or centrally located to allow consolidation of advanced treatment of effluent from multiple HRSD facilities. HRSD does not have adequate land available at the following treatment plants: Williamsburg, Boat Harbor, Army Base, and the Virginia Initiative

Plant. Accordingly, HRSD is actively seeking appropriate sites for SWIFT facilities for these existing treatment plants.

D. HRSD has identified approximately thirty-five (35) acres of land adjacent to the Virginia Initiative Plant as a potential location for a consolidated SWIFT facility to provide advanced water treatment for the effluent from the two Norfolk HRSD facilities (Army Base and Virginia Initiative Plant). The consolidated facility may provide a more cost-effective long-term solution for SWIFT. The land is owned by the City and is currently used as a municipal golf course known as Lambert's Point Golf Course.

E. The City desires to sell and HRSD desires to purchase the land for the construction and operation of wastewater treatment and/or SWIFT related facilities and the associated easements through adjacent City owned property required for construction and utilities to serve the parcel (the "Property"). The Property is approximately as shown on Attachment A with the exact parcel and easements to be defined by a subdivision plat to be prepared by HRSD, at HRSD's expense, in coordination with the City. The expectation is that the subdivision plat can be obtained without requiring HRSD to commit substantial funds for capital improvements or additional acquisition of real estate other than the Property.

F. The City desires to maintain open space along the water for public recreation, and HRSD has agreed to provide an easement approximately 125 feet wide with exact dimensions to be defined by the subdivision plat described in E to the City for the portions of the Property along the waterfront for public recreation activities, including, without limitation, possible connections to the Elizabeth River Trail (the "Open Space Easement"). The City shall be responsible for all costs and risks associated with the Open Space Easement. HRSD shall have no obligation to modify the Open Space Easement in the event the shoreline changes due to erosion.

G. The City, at the City's option, may maintain the driving range as an amenity for its citizens. The existing golf course parcel shall be subdivided to keep as much space as possible for a reconfigured driving range on the portion to the property to be retained by the City of Norfolk. The driving range shall be configured so as not to unreasonably interfere with HRSD's Intended Use of the Property (defined below).

## **AGREEMENT**

NOW, THEREFORE, in consideration of the foregoing (hereby incorporated as if fully set forth herein), the mutual covenants and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which HRSD and the City acknowledge, the Parties hereby agree as follows.

1. Option. The City hereby grants to HRSD an option to purchase the Property upon the terms and conditions set forth herein.

2. Due Diligence. The "Due Diligence Period" shall be a period of ninety (90) days running from the date this Agreement has been fully executed by the parties hereto. HRSD shall have the right to extend the Due Diligence Period for one (1) additional period of ninety (90)

days by giving the City written notice thereof prior to the expiration of the Due Diligence Period. During the Due Diligence Period, HRSD shall determine if the results of its inspections, investigations and the like are satisfactory to HRSD. The City and HRSD shall do the following during the Due Diligence Period:

(a) Subdivision. Within a reasonable time after the full execution of this Agreement by the parties hereto, the City and HRSD shall determine the boundary lines of the Property. HRSD, at its sole cost and expense, shall then cause the Property to be surveyed and a subdivision plat to be prepared that creates two parcels, one to be sold to HRSD for the Intended Use, as hereinafter defined, and the other to remain owned by the City. The subdivision plat shall vacate all existing property lines internal to the parcels created thereby. The subdivision plat shall also include any easements necessary for HRSD's Intended Use of the Property and the Open Space Easement. The City will process the subdivision plat in a timely manner and in accordance with established processes.

Failure of the parties to agree upon a subdivision plat or of the City to approve the Subdivision Plat, with terms and conditions to which HRSD approves, with the Property designated, contiguous to the existing HRSD Virginia Initiative Plant, approximately shaped as shown on Attachment A, and including the Open Space Easement, on or prior to June 30, 2018, or a mutually agreed upon alternate date, releases HRSD and the City from any and all obligations contained herein, including HRSD's obligation to pay the Option Fee but excluding any obligations of HRSD pursuant to the right of entry set forth in Section 3 below.

(b) Zoning. No later than thirty (30) days after the parties have agreed upon the boundary lines of the Property, HRSD shall submit a completed application to the City's Department of Planning and Community Development for rezoning of the Property to a zoning classification that permits the Intended Use, as hereinafter defined. The City shall sign the application as the property owner. HRSD has no obligation to accept any terms and conditions required by the City to obtain the required zoning. The parties shall work diligently to complete the rezoning process prior to the expiration of the Due Diligence Period. If the Property is not rezoned to a zoning classification that permits the Intended Use prior to the expiration of the Due Diligence Period as extended in accordance with the terms hereof, HRSD shall have the right to terminate this Agreement by written notice to the City.

(c) Environmental. HRSD acknowledges that the Property is a former incinerator site. HRSD shall cause any environmental studies that it deems necessary to be performed, at its sole cost and expense, during the Due Diligence Period. Except as expressly set forth in this Agreement, HRSD will accept the use and conveyance of the Property "as is", including, without limitation, the environmental condition of the Property. HRSD shall have no obligation to pay any consideration hereunder until it has completed its due diligence hereunder.

(d) Title.

(i) No later than ten (10) days after the latest of HRSD receiving a fully executed copy of this Agreement, a definitive plat of the Property and the ALTA survey, HRSD shall request a buyer's title commitment (the "Title Commitment") for the proposed Property issued by a reputable title insurance company in the amount of the estimated Purchase

Price, and within fifteen (15) days after HRSD's receipt of such commitment shall notify City of any matters reported in the Title Commitment that would make title to the Property unmarketable or uninsurable under an ALTA owner's title insurance policy or that would adversely affect the use of the Property for the Intended Use in the reasonable opinion of HRSD (such matters are referred to herein as the "Title Objections").

(ii) The City shall have a reasonable time to cure any Title Objections (but in no event greater than ninety (90) days), but City shall have the option of declining to cure any Title Objection by providing written notice thereof to HRSD within thirty (30) days after receipt of HRSD's written notice of such Title Objections, and if the City declines to cure any Title Objection or does not cure any Title Objections that it has agreed to cure prior to the expiration of the Due Diligence Period, the HRSD shall have the right either to waive its Title Objections in writing and to proceed with the Option subject to such Title Objections which shall be considered "Permitted Exceptions" or to terminate this Agreement prior to the Option Payment Deadline, provided, however, if any Title Objection is not capable of being cured within the ninety (90) day period, the City shall work diligently to cure such Title Objection prior to Closing.

3. Right of Entry. At all times prior to the expiration or sooner termination of this Agreement, but upon prior reasonable advance notice to the City and the tenant operating the driving range, HRSD shall have the right to enter onto the Property for the purpose of making surveys, environmental tests, and soil tests provided such testing does not materially interfere with City's use of the Property and further provided that said tests shall not be so exercised as to cause material damage to said Property. All such testing is to be at the risk and expense of HRSD. In connection with this right to enter upon the Property, HRSD agrees (i) to restore the Property to its prior condition after the performance of any such survey or other investigation and (ii) to indemnify, defend and hold the City harmless from and against all costs, losses, damages, and expenses, including reasonable attorneys' fees, arising out of the activities of HRSD and/or its employees, agents and representatives on the Property. The City shall have the right to be present during any entry upon the Property by HRSD.

4. Option Notice. On or prior to that date which is five (5) days after the expiration of the Due Diligence Period (the "Option Payment Deadline"), provided that HRSD does not terminate this Agreement in accordance with the terms hereof, HRSD shall pay, as additional consideration for the Option granted herein, Fifteen Million and 00/100 Dollars (\$15,000,000) (the "Option Fee"), which sum shall be non-refundable and shall be paid by HRSD to the City by wire transfer. If the Option Fee is not paid to the City in accordance with the terms hereof by the Option Payment Deadline, the City shall provide HRSD with written notice of its failure to pay and, absent such payment, this Agreement shall terminate automatically on that date which is thirty (30) days after the Option Payment Deadline. If the Option Fee is paid in accordance with the terms set forth herein, the Option shall then be non-revocable by the City and the Option Fee shall not be credited against the purchase price at settlement. In the event HRSD fails to exercise the Option granted hereunder and to close on the purchase of the Property prior to the expiration of the Option Term, the Option Fee shall continue to be the property of City and shall not be returned to HRSD.

5. Term. Provided that the Option Fee is paid by HRSD in accordance with the terms of this Agreement, the Option granted hereunder shall continue in effect until 5:00 p.m. on December 1, 2023 (the "Option Term").

6. Exercise of the Option. The Option granted hereunder shall be exercisable by HRSD by giving written notice to the City prior to the expiration of the Option Term in accordance with Section 14 below. HRSD may not exercise the option before January 1, 2023 without written consent of the City.

7. Purchase and Sale Agreement. If the Option is exercised by HRSD, this Agreement shall become a contract for the purchase and sale of the Property upon the following terms and conditions:

(a) The purchase price shall be Fifteen Million and 00/100 Dollars (\$15,000,000) escalated from the date of this Agreement to the date of settlement by the Consumer Price Index for All Urban Consumers (CPI-U) as published by the Bureau of Labor Statistics. The Purchase Price shall be paid to the City by wire transfer at the time of settlement.

(b) Closing shall occur as soon as reasonably possible after HRSD exercises the option in accordance with the terms herein but in no event later than March 31, 2024 (the "Outside Closing Date"). Closing shall be held in the office of HRSD's closing agent/attorney, on or before the Outside Closing Date; provided, however, all documents requiring execution on behalf of the City may be executed prior to settlement and delivered by the City to the closing agent/attorney in escrow. HRSD shall provide the City with at least thirty (30) days' prior written notice of its desired approximate Closing date.

(c) At closing, upon payment as above provided, City shall deliver to HRSD a special warranty deed conveying the Property to HRSD by reference to the Subdivision Plat and reserving the Open Space Easement. Title shall be good and marketable, free of liens and encumbrances except the Permitted Exceptions and the Open Space Easement. City shall also provide a standard owner's affidavit as customarily required by title companies pertaining to mechanic's liens and absence of tenants in occupancy of the Property and shall execute a settlement statement in a form that is mutually acceptable to both City and HRSD. Except as expressly set forth in this Agreement, HRSD will accept the use and conveyance of the Property "as is.", including, without limitation, the environmental condition of the Property.

(d) Real estate taxes and other public charges applicable to the Property, including charges for sewer and water, if any, shall be apportioned.

(e) The City is exempt from grantor's tax upon recordation of the deed. HRSD shall pay any other recording costs and state and local recordation taxes applicable to the recordation of the deed.

(f) City agrees that it will join, as the owner of the Property, with HRSD, at no cost or liability to City, in the signing of any applications for permits or licenses or in recording plats or in such other actions as may be necessary or required for HRSD's Intended Use of the Property.

(g) If HRSD exercises the Option hereunder but fails to deliver the Purchase Price to City at Closing as provided above, the City shall have the right to terminate this Agreement immediately upon written notice to HRSD and both parties' rights and obligations hereunder shall terminate, except for HRSD's obligations under Section 1 above and the City shall retain the Option Fee as its sole remedy for such breach.

(h) If HRSD exercises the Option hereunder but the City fails to deliver title to HRSD at Closing free and clear of all leases, tenancies, rights of occupancies or fails to meet its obligations as provided herein, HRSD shall have the right to terminate this Agreement immediately upon written notice to the City and both parties' rights and obligations hereunder shall terminate, and the City shall refund the Option Fee as HRSD's sole remedy for such breach.

(i) At closing, HRSD, in addition to any other documents required to be delivered under the terms of this Agreement, shall deliver the following to the City: a counterpart signed copy of the Settlement Statement; the Purchase Price by wire transfer; a written opinion of counsel of HRSD, in form commercially reasonable satisfactory to the City (assuming that all signatures are genuine, and further assuming that all documents presented to such counsel as copies conform with the originals), stating (1) that HRSD has the power to enter into the transactions contemplated by this Agreement (including, without limitation, entry into this Agreement); (2) that all actions by HRSD required to be authorized in the transaction contemplated by this Agreement have been duly authorized; and (3) that this Agreement and all documents required to effectuate the transactions contemplated hereby which are to be executed by HRSD (including, without limitation, all agreements and instruments to be executed by HRSD at Closing) have been duly executed and delivered by HRSD, and constitute binding obligations of HRSD, enforceable in accordance with their terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganizations, moratoriums or similar laws affecting the enforcement of creditors' rights generally and by legal and equitable limitation on the enforceability of specific remedies; resolutions of the HRSD's Commissioners ("Commission"), authorizing HRSD to consummate the transactions contemplated herein, such resolutions to be in form and substance reasonably satisfactory to the City; and any other document or instrument required hereunder or reasonably requested by the City in order to consummate the transactions contemplated herein, which document or instrument will be in form and substance reasonably acceptable to the HRSD and the City.

(j) Possession of the Property shall be delivered to HRSD as of the date of Closing, free and clear of all leases, tenancies and rights of occupancy.

8. Leases. City warrants that there are no unrecorded leases or rights of tenants in possession to which the Property is subject and agrees in the event of a breach of this warranty, City shall refund the Option Fee to HRSD, except for the Golf Course Lease which shall be terminated prior to the Closing. Possession of the Property shall be delivered to HRSD as of the settlement date, free and clear of all leases, tenancies and rights of occupancy.

9. Intended Use/Permitted Use; Right of First Refusal. HRSD shall use the Property, solely for the construction and operation of an expanded wastewater treatment facility and/or SWIFT related facilities and uses incidental thereto (the "Intended Use"). In the event (a) the HRSD purchases the Property but fails to develop all of the Property for the Intended Use



and if HRSD desires to sell any portion of the Property, the City shall have the right of first refusal to purchase such undeveloped portion of the Property at the lower of (a) the sum of the prorated Purchase Price and the prorated Option Fee less the cost to demolish any structures placed on the Property to be repurchased by HRSD or (b) a bona fide third-party written offer to purchase. In the event the City elects to repurchase the undeveloped portion of the Property pursuant to this Section 9, City shall provide written notice of its intent to repurchase and shall have 180 days to close upon such repurchase. At or prior to closing on the repurchase, HRSD shall execute and deliver a special warranty deed to the City re-conveying such portion of the Property as well as all improvements thereon to the City free and clear and any encumbrances, except for the Permitted Exceptions, the City's Open Space Easement, and any new encumbrances which would be typical for development of the Property for the Intended Use. Notwithstanding any provision to the contrary, once the HRSD commences operations on any portion of the Property for the Intended Use, then City's right to repurchase such portion of the Property shall become void.

10. Approvals. HRSD is solely responsible for securing all governmental permits, licenses and other approvals including, but not limited to, site plan, subdivision plat, zoning, building permits, and environmental permits necessary for development of the Property for its Intended Use. HRSD acknowledges that the City approvals required for development of the Property, including, without limitation, the Subdivision Plat and zoning, are administrative functions of the City that are separate from and independent of this Agreement.

11. Utilities. HRSD shall be responsible for confirming the existing public utilities adjacent to or downstream of the Property are adequate to support the Intended Use. Any public utility upgrades necessary to support the Intended Use shall be designed and constructed by HRSD at HRSD's expense. HRSD shall be responsible for the relocation of any utilities which is necessitated by the construction on the Property and for connecting to public utility lines located in public rights of way, and all costs thereof shall be paid and borne by HRSD. Connection fees and tap fees for such public utilities serving the Property will be HRSD's responsibility. The cost of franchise utility services for the Property shall be the responsibility of HRSD.

12. Design Review Exemption. Pursuant to Norfolk City Code Section 32-70(b)(6), the Project shall be exempt from design review by the City's Architectural Review Board ("ARB"). Notwithstanding this exemption, if not previously delivered to the City, as part of HRSD's site plan approval process after exercising the Option, HRSD shall cause to be delivered to the City the information that would be included in an application for design review by the ARB if the project were not exempt.

13. Open Space Easement. HRSD shall be responsible for maintaining the shoreline of the Property in accordance with all applicable laws, including those portions of the Property that are within the Open Space Easement area. The City shall have the right, at its sole cost and expense, to cause improvements, including without limitation, a pathway, lighting (including the necessary electrical connections), benches, fitness equipment, playground equipment, and picnic shelters, to be constructed in the Open Space Easement area. HRSD shall grant any utility easements in the Open Space Easement area which are necessary to allow for such improvements provided such easements do not interfere with HRSD's Intended Use of the Property. The City

shall be responsible for maintenance of any such public improvements constructed by the City in the Open Space Easement area, including mowing in the areas around such improvements. The boundary line of the Open Space Easement shall be fixed by the recorded subdivision plat and will not change based on erosion or other changes in the shoreline. To the extent allowed by applicable law, the City shall indemnify and hold HRSD harmless from and against all claims or causes of action arising from the City's and the public's use of the Open Space Easement area.

14. Default; Remedies. The occurrence of any of the following shall be an event of default by HRSD under this Agreement:

(a) The filing by HRSD of a voluntary proceeding under present or future bankruptcy, insolvency, or other laws respecting debtors' rights.

(b) The consent by HRSD to an involuntary proceeding under present or future bankruptcy, insolvency, or other laws respecting debtor's rights.

(c) The entering of an order for relief against HRSD or the appointment of receiver, trustee, or custodian for all or a substantial part of the property or assets of HRSD in any involuntary proceeding, and the continuation of such order, judgment or decree unstayed for any period of thirty (30) consecutive days.

(d) The failure of HRSD to perform or to observe any covenant, obligation, condition or requirement of this Agreement not specifically named as a default in this Section 16, and the continuation of such failure for thirty (30) days after written notice from the City specifying the nature and extent of any such default, or, if such default cannot reasonably be cured within such thirty (30)-day period, the failure either (i) to commence to cure such default within such thirty (30)-day period and to diligently continue to pursue such effort to cure to completion, or (ii) to cure such default within a reasonable time after the expiration of the first thirty (30)-day period, in no event to exceed ninety (90) days after the written notice of default.

(e) Upon the occurrence and continuance of any event of default described in this Section 14 or any other breach of this Agreement, the City may elect to terminate this Agreement by giving written notice of such termination to HRSD, and this Agreement shall terminate as of the date specified in such notice (which date shall be on or after the date of the notice of termination). In addition to the remedies of termination described above and except as set forth in Section 7(g) and Section 7(h) above, a non-defaulting party shall have available to it all other rights and remedies provided in this Agreement or at law or in equity.

(f) In the event that termination by the City under this Section 14 occurs after Closing, the City shall have the right to repurchase the Property at for the sum of the Purchase Price and the Option Fee less the cost to demolish any structures placed on the Property by HRSD. At or prior to closing on the repurchase, HRSD shall execute and deliver a special warranty deed to the City re-conveying the Property as well as all improvements thereon to the City free and clear and any encumbrances, except for the Permitted Exceptions any new encumbrances which would be typical for development of the Property for the Intended Use.

(g) Except as set forth in Section 7(g) and Section 7(h), remedies under this Agreement shall be cumulative and not restrictive of other remedies.

15. Notices. All notices, requests or other communications under this Agreement shall be in writing and shall be delivered either in person (when delivered) or sent by registered or certified mail, return receipt requested, postage prepaid (three business days thereafter), or by overnight mail by a nationally recognized overnight carrier (one business day thereafter) addressed to the respective parties hereto as follows:

City: City Manager  
City of Norfolk  
810 Union Street  
1101 City Hall Building  
Norfolk, VA 23510

With a  
copy to: City Attorney  
City of Norfolk  
810 Union Street  
900 City Hall Building  
Norfolk, VA 23510

HRSD: General Manager  
Hampton Roads Sanitation District  
1434 Air Rail Avenue  
Virginia Beach, VA 23455

16. No Third-Party Beneficiaries. This Agreement is solely for the benefit of the Parties hereto and their permitted successors and assigns and shall not confer any rights or benefits on any other person or entity.

17. No Assignment. This Agreement, and the rights and obligations established hereunder, shall be binding upon and inure to the benefit of any successors of the Parties. However, no Party may transfer or assign this Agreement, or its rights or obligations hereunder, without the prior written consent of the other Party, which consent may be withheld in the parties' sole and absolute discretion.

18. Expenses; Commissions. Except as provided herein, each Party shall pay its own fees and expenses, including its own counsel fees, incurred in connection with this Agreement or any transaction contemplated hereby. The Parties represent and warrant to each other that they have not dealt with any business broker or agent who would be entitled to a brokerage commission or finder's fee as a result of this Agreement or any related transactions.

19. Governing Law; Venue; Severability. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the Commonwealth of Virginia. This Agreement is a Virginia contract deemed executed and accepted in the City of Norfolk; and all questions with respect to any of its provisions shall be instituted, maintained, and contested in a state court of competent jurisdiction in the City of Norfolk, Virginia. If any word or provision of this Agreement as applied to any Party or to any circumstance is adjudged by a court to be

invalid or unenforceable, the same shall in no way affect any other circumstance or the validity or enforceability of any other word or provision.

20. No Waiver. Neither any failure to exercise or any delay in exercising any right, power or privilege under this Agreement by either Party shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege hereunder preclude the exercise of any other right, power or privilege. No waiver of any breach of any provision shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision, nor shall any waiver be implied from any course of dealing.

21. Entire Agreement; Amendments. This Agreement contains the entire agreement between the Parties as to the subject matter hereof and supersedes all previous written and oral negotiations, commitments, proposals and writings. No amendments may be made to this Agreement except by a writing signed by both Parties.

22. Counterparts; Signatures; Copies. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A facsimile or scanned signature may substitute for and have the same legal effect as an original signature. Any copy of this executed Agreement made by photocopy, facsimile or scanner shall be considered the original for all purposes.

23. Recording. This Agreement or a mutually agreeable memorandum of this Agreement may be recorded by either party hereto at its cost and expense.

24. Authorization. Each Party represents that its execution, delivery and performance under this Agreement have been duly authorized by all necessary action on its behalf, and do not and will not violate any provision of its charter or enabling legislation or result in a material breach of or constitute a material default under any agreement, indenture, or instrument of which it is a party or by which it or its properties may be bound or affected.

**[SIGNATURES BEGIN ON NEXT PAGE]**

IN WITNESS WHEREOF, the Parties hereto have caused the execution of this Agreement as of the date first written above.

Witness the following signatures and seals:

**[SIGNATURE PAGE OF OPTION TO PURCHASE REAL ESTATE (Hampton Roads Sanitation District – City of Norfolk)]**

**HAMPTON ROADS SANITATION DISTRICT**

By:   
Name: Edward G Henifin, P.E.  
Title: General Manager

COMMONWEALTH OF VIRGINIA  
CITY OF Virginia Beach, to-wit:

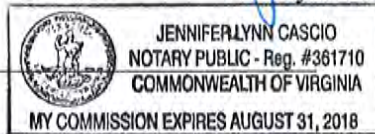
I, Jennifer L. Cascio, a Notary Public in and for the City of Virginia Beach, in the Commonwealth of Virginia, do hereby certify that Edward G. Henifin, General Manager of Hampton Roads Sanitation District, whose name as such is signed to the foregoing Option to Purchase Real Estate, has acknowledged the same before me in the City and Commonwealth aforesaid.

Given under my hand this 29<sup>th</sup> day of March, 20 18.

  
Notary Public

Registration Number: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



**[Signatures continue on next page]**

[CONTINUATION OF SIGNATURE PAGES TO OPTION TO PURCHASE REAL ESTATE (Hampton Roads Sanitation District – City of Norfolk)]

CITY OF NORFOLK

By: *Douglas L. Smith*  
Name: Douglas L. Smith  
Title: City Manager

ATTEST:  
*R. Breckenridge Daughtrey*  
City Clerk

Approved as to Form and Correctness:  
*Michelle G.*  
Assistant City Attorney

COMMONWEALTH OF VIRGINIA  
CITY OF NORFOLK, to-wit:

I, *Kimberly K. Markowski*, a Notary Public in and for the City of Norfolk, in the Commonwealth of Virginia, do hereby certify that Douglas L. Smith, City Manager, and R. Breckenridge Daughtrey, City Clerk, of the City of Norfolk, whose names as such are signed to the foregoing Option to Purchase Real Estate, have acknowledged the same before me in the City and Commonwealth aforesaid.

Given under my hand this 20<sup>th</sup> day of April, 2018

*Kimberly K. Markowski*  
Notary Public

Registration Number: 213345

My Commission Expires: 4/30/2020



ATTACHMENT A



HRSD Commission Meeting Minutes

November 24, 2020

Attachment 7

AGENDA ITEM 15. – November 24, 2020

**Subject:** Exemption from Mandated Utility Disconnect Moratorium Resolution





**RESOLUTION VERIFYING AND APPROVING ARREARAGES ARE IN EXCESS OF ONE PERCENT OF ANNUAL OPERATING REVENUES**

**WHEREAS**, during the 2020 Special Session I (Budget Bill - HB5005, Item 4-14) the Virginia General Assembly approved specific procedures and requirements for utility service applicable in the coronavirus-related declared state of emergency, including provisions related to customer assistance grants, utility shut offs for nonpayment, and repayment plans for customer utility debt; and

**WHEREAS** HRSD is well-positioned to implement these new procedures and requirements because HRSD has always worked to find fiscally responsible ways for all customers to pay their bills with flexible repayment plans; and

**WHEREAS**, HRSD operates a sophisticated and technically complex regional wastewater system, protecting public health and the environment by treating an average of 150 million gallons of wastewater daily from Hampton Roads' residents, businesses, and industries; and

**WHEREAS**, HRSD's only source of revenue is the wastewater charges collected from customers for the wastewater services received from HRSD; and

**WHEREAS**, those wastewater charges are based on rates established to recover full cost of operations without reserve for forgiveness of payment due for services received; and

**WHEREAS**, HRSD's normal collection process for unpaid bills employs industry-standard procedures including disconnection of water service in appropriate cases, which has proven very effective in minimizing losses; and

**WHEREAS**, HRSD self-imposed a moratorium on disconnection of water service for unpaid bills in March 2020 in response to the coronavirus pandemic and continued to offer customers the opportunity to request repayment plans; and

**WHEREAS**, a significant number of accounts have overdue balances that have grown since March, to the point where customers may be very challenged to finally repay without making an effort to begin paying down balances over time through a repayment plan; and

**WHEREAS**, during the disconnection moratorium period to date, customers generally have not availed themselves of repayment plan opportunities, which results instead in growing debt levels; and

**WHEREAS**, based on HRSD accounting records, HRSD has determined and documented in a written analysis that account receivable arrearages exceed one percent of annual operating revenues and provided such analysis to the HRSD Commission; and

**WHEREAS**, HRSD has contemporaneously made the associated working papers verifying such facts available for public inspection on the HRSD website; now therefore be it

**RESOLVED by the HRSD Commission** that it has reviewed the calculations of account receivable arrearages and verifies that the arrearages exceed one percent of annual operating revenues; be it

**RESOLVED FURTHER**, that HRSD re-initiate normal collection procedures to include disconnection of water service, should that be required to get customer response, while continuing normal procedures to avoid disconnecting water service for any customer that has contacted HRSD for assistance with establishing a repayment plan or similar assistance in bringing their account into a current status; be it

**RESOLVED FURTHER**, that the General Manager shall undertake, and shall have the necessary authority to undertake, all reasonable efforts and required processes to request, receive, and apply available state and federal customer assistance funding offered through the State Corporation Commission and the Virginia Department of Housing and Community Development, including appropriate modifications to normal billing and collection procedures as needed to facilitate such state and federal assistance.

*Adopted by the HRSD Commission on the twenty-fourth day of November 2020.*



Frederick N. Eloffson, CPA  
HRSD Commission Chair



November 17, 2020

RE: Work Papers – Account Balances Overdue as of October 31, 2020

HRSD Funds Flow FY 2021														
**Replace Prior Mo w/Copy pas	AMENDED Budget	Monthly Jul-20	Monthly Aug-20	Monthly Sep-20	Monthly Oct-20	Monthly Nov-20	Monthly Dec-20	Monthly Jan-21	Monthly Feb-21	Monthly Mar-21	Monthly Apr-21	Monthly May-21	Monthly Jun-21	FINAL Jun-21
<b>Operating Revenues</b>		Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	
Wastewater	312,218,000	28,290,134	27,902,485	29,015,156	26,888,982	26,018,167	26,018,167	26,018,167	26,018,167	26,018,167	26,018,167	26,018,167	26,018,167	320,242,090
Surcharge	1,522,000	146,447	155,564	137,110	121,757	126,833	126,833	126,833	126,833	126,833	126,833	126,833	126,833	1,575,545
Indirect Discharge	3,200,000	248,886	272,904	268,324	281,093	266,667	266,667	266,667	266,667	266,667	266,667	266,667	266,667	3,204,540
Fees	3,020,000	156,591	164,056	170,321	209,716	251,667	251,667	251,667	251,667	251,667	251,667	251,667	251,667	2,714,017
Municipal Assistance	700,000	109,159	26,141	28,976	101,586	58,333	58,333	58,333	58,333	58,333	58,333	58,333	58,333	732,529
Miscellaneous	1,165,000	26,935	33,317	390,456	57,843	97,083	97,083	97,083	97,083	97,083	97,083	97,083	97,083	1,285,218
<b>Total Operating Revenue</b>	<b>321,825,000</b>	<b>28,978,152</b>	<b>28,554,467</b>	<b>30,010,343</b>	<b>27,660,977</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>26,818,750</b>	<b>329,753,939</b>

HRSD FY21 AGING								
HRSD	July 2020	% A/R	AUGUST 2020	% A/R	SEPTEMBER 2020	% A/R	OCTOBER 2020	% A/R
31-60 DAYS	3,504,868.98	28.6%	4,056,820.58	28.7%	3,337,974.89	23.6%	4,249,855.19	26.7%
61-90 DAYS	1,692,303.50	13.8%	2,303,582.59	16.3%	2,210,839.39	15.6%	2,153,837.69	13.5%
90+	7,072,608.56	57.6%	7,751,490.52	54.9%	8,605,468.93	60.8%	9,518,685.41	59.8%
<b>TOTAL HRSD AGED BALANCES</b>	<b>12,269,781.04</b>	<b>100%</b>	<b>14,111,893.69</b>	<b>100%</b>	<b>14,154,283.21</b>	<b>100%</b>	<b>15,922,378.29</b>	<b>100%</b>
<b>Total "Accounts Receivable Arrearages for Virginia Customers"</b>							<b>\$</b>	<b>15,922,378</b>
<b>Projected FY21 Total Operating Revenue</b>							<b>\$</b>	<b>329,753,939</b>
<b>Accounts Receivable Arrearages as a portion of Projected FY21 Total Operating Revenue</b>								<b>4.8%</b>

**Notes:**

- Operating Revenues represent billed amounts and are not cash basis except for Miscellaneous. Projected amounts are based on the original budgeted amount divided by 12.
- Aging dates are the number of days from the bill due date. Bills are due within 30 days. Accounts Receivable Arrearages are the amounts that have not been received from day 31 and greater.
- Aging balances are for all customer accounts and includes any late fees and interest due

HRSD Commission Meeting Minutes

November 24, 2020

Attachment 8

AGENDA ITEM 16. – November 24, 2020

**Subject:** COVID-19 Wastewater Surveillance Study Update

[Presentation](#)

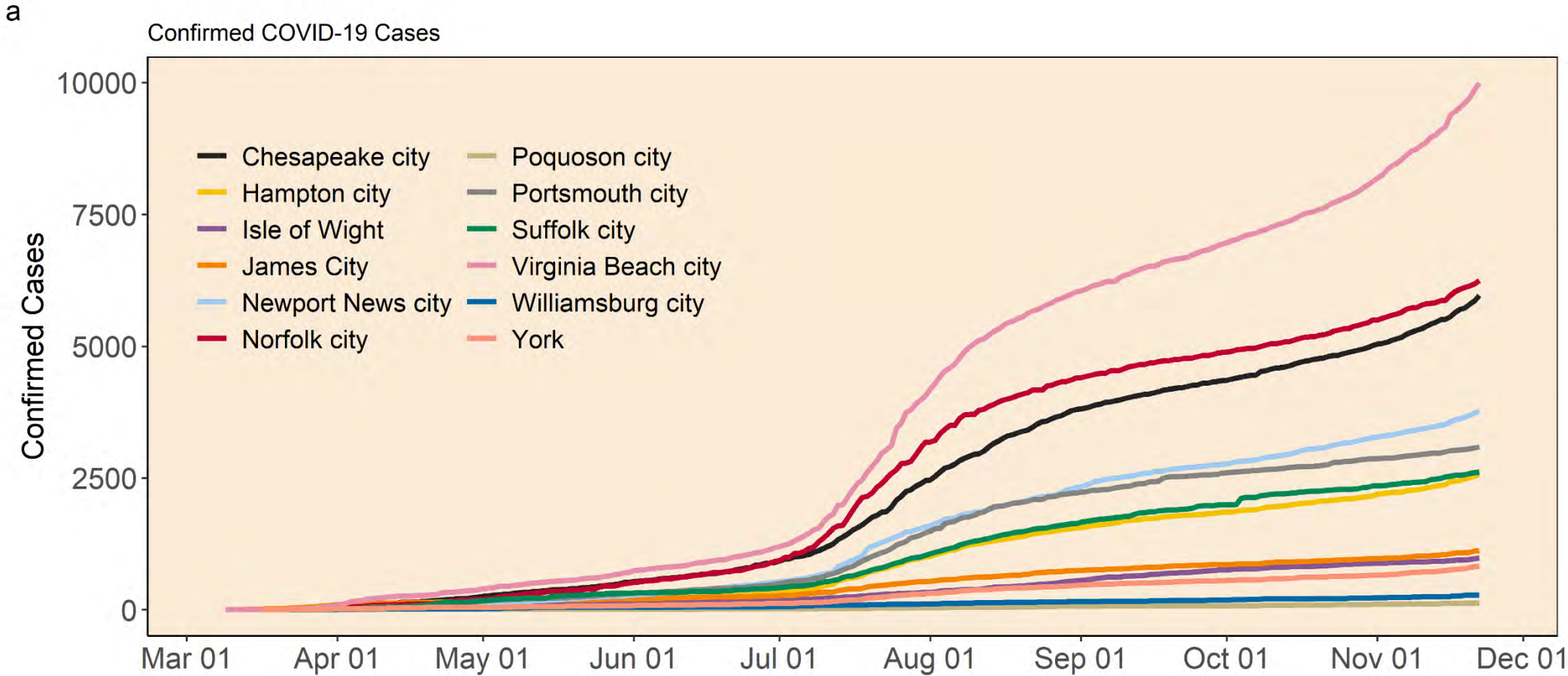


# COVID-19 Surveillance Commission Update

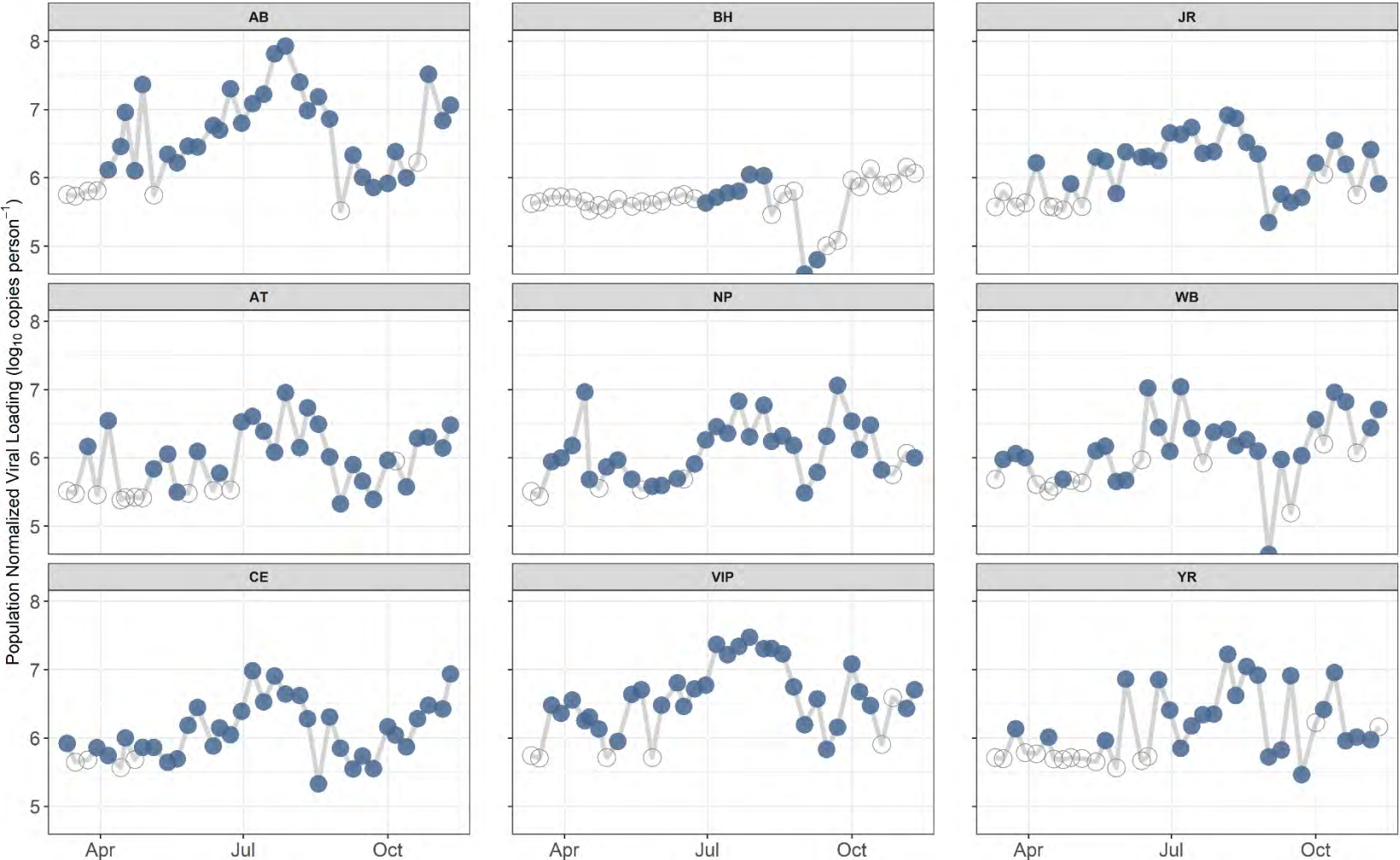
November 24, 2020

- Weekly sampling of the 9 major facilities
- Data through 11/10 presented here
- General notes;
  - Noisy, upward trend for Oct. – early Nov.
  - Not as pronounced as summer peak
  - Clinical cases increasing

# COVID-19 Cases in Hampton Roads

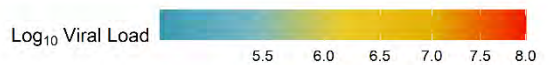
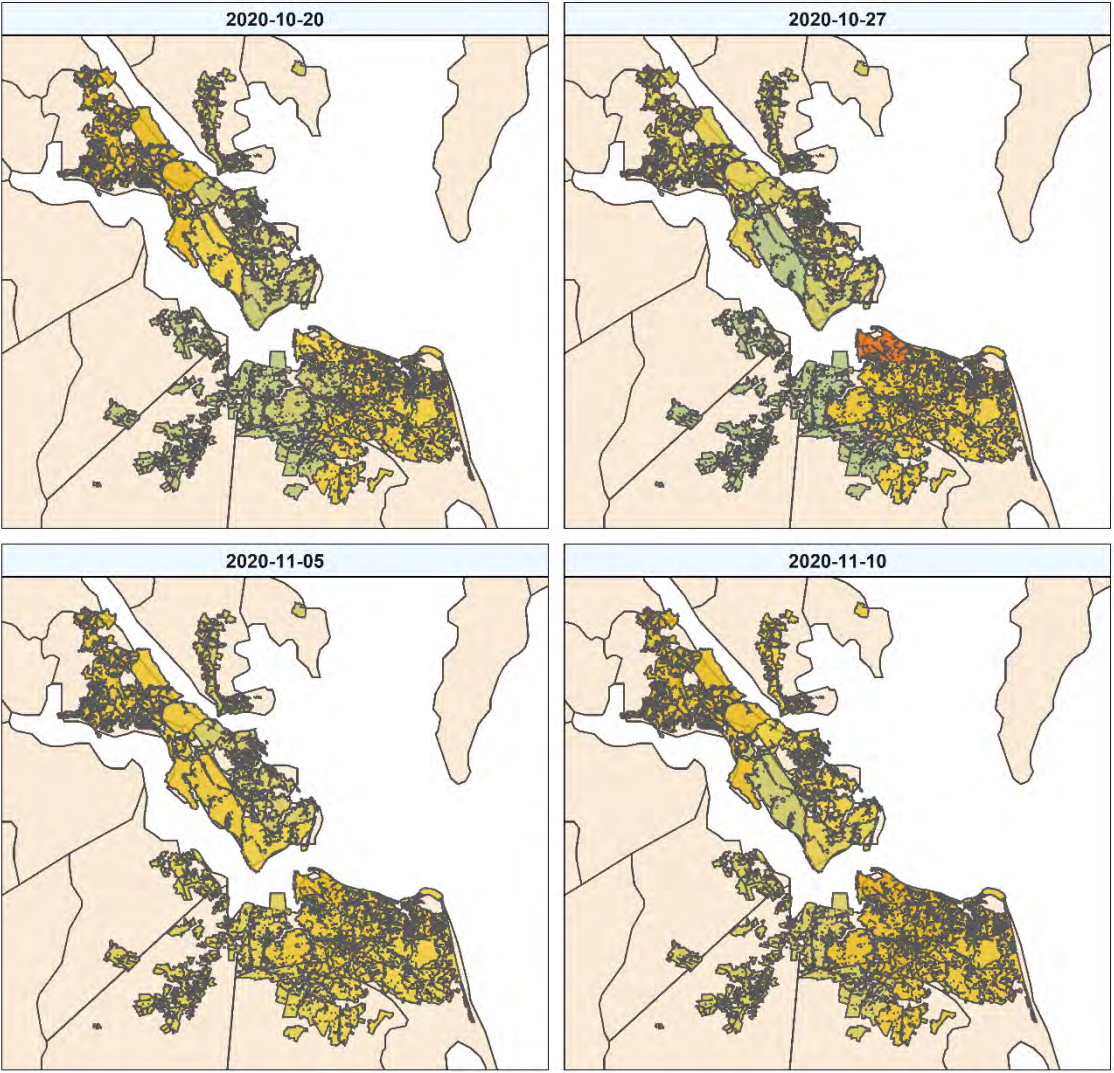


# Population Normalized SARS-CoV-2 Loading

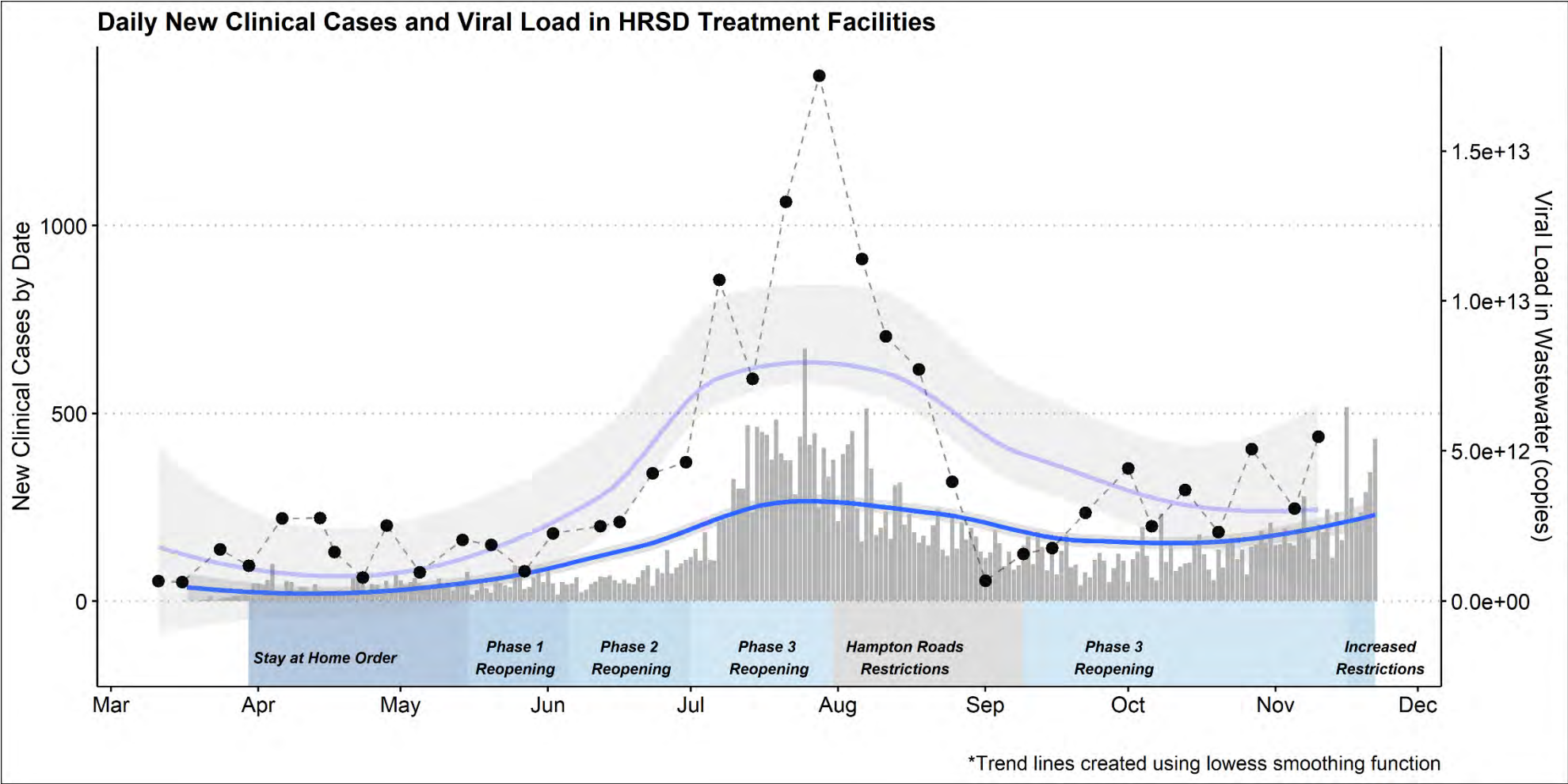




# Most Recent 4 Weeks



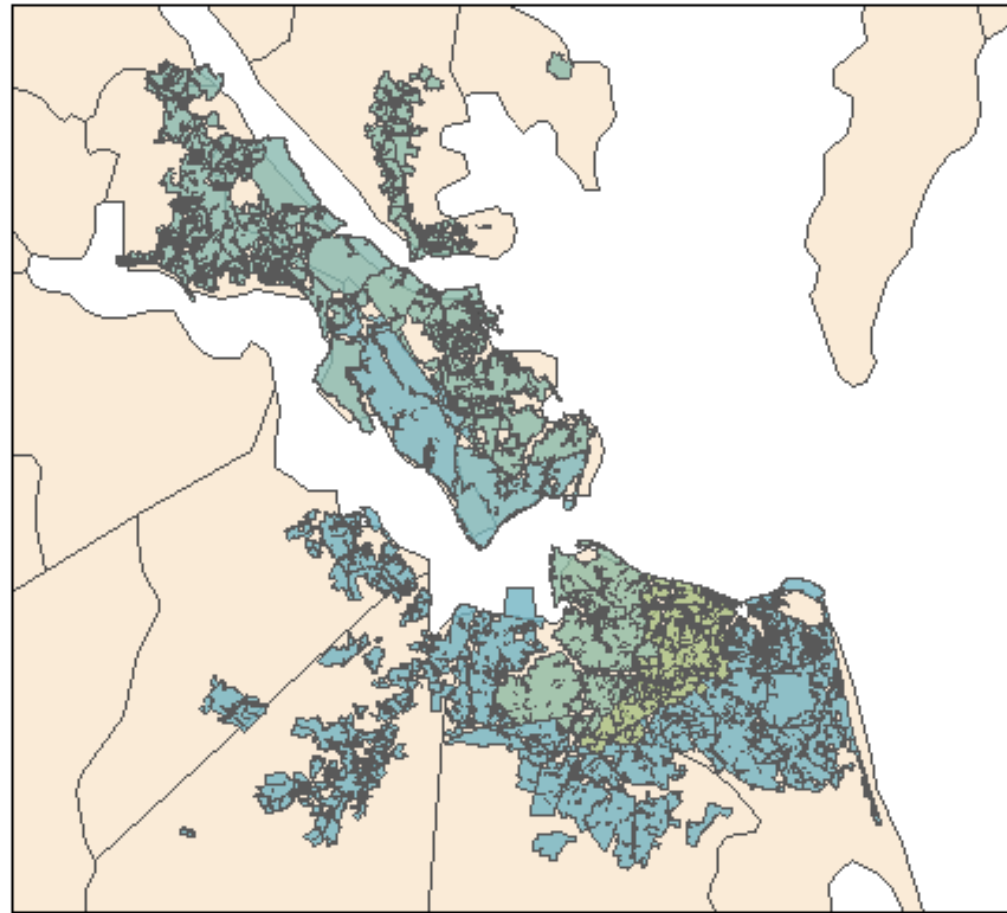
# Regional Viral Load



- Continued weekly monitoring of 9 major facilities
- Continue to provide data to VDH and CDC
- Presentation to VA State Board of Health next week (12/3)
  - Hampton Roads WW Surveillance Workgroup
    - Anna Jeng (ODU)
    - Raul Gonzalez (HRSD)
    - Marcia Degen (VDH)

Population Normalized SARS-CoV-2 Loading

Date: 2020-03-11



HRSD Commission Meeting Minutes

November 24, 2020

Attachment 9

AGENDA ITEM 21. – November 24, 2020

**Subject:** Informational Items

- a. Management Reports
  - (1) [General Manager](#)
  - (2) [Communications](#)
  - (3) [Engineering](#)
  - (4) [Finance](#)
  - (5) [Information Technology](#)
  - (6) [Operations](#)
  - (7) [Talent Management](#)
  - (8) [Water Quality](#)
  - (9) [Report of Internal Audit Activities](#)
- b. [Strategic Planning Metrics Summary](#)
- c. [Effluent Summary](#)
- d. [Air Summary](#)

November 16, 2020

Re: General Manager's Report

Dear Commissioners:

In contrast to the challenges faced in September with remnants of Hurricane Sally, October was a quiet month. The challenges of working during a global pandemic; however, continue with new requirements now in place for daily documentation of employee health. We continue to adjust our work practices as required to protect our employees from COVID exposures. The staff in Talent Management continue to do an outstanding job tracking and tracing cases. The infection rate among HRSD employees continues to be about half of the state average, a tribute to the efforts all of our employees are making to keep their families, friends, coworkers and community safe by maintaining appropriate physical distancing at all times, wearing face masks (covering nose and mouth), washing hands frequently, wiping down shared surfaces and staying home when not feeling well.

HRSD jobs are challenging in the best of times. The added challenge of working in this pandemic is wearing on everyone, those coming to work every day and those working from home. From all reports we are looking at many more months, with some of the most challenging yet to come. We are committed to doing everything we can to keep our employees safe while they work to protect public health by preventing waterborne illness.

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

1. **Treatment Compliance and System Operations:** There were a few minor issues, but all plants met permit for the month. Highlights for the month can be found in the attached monthly reports.
2. **Internal Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted) with HRSD personnel:
  1. Architectural review of the Tabb PRS project and coordination with York County
  2. A meeting to discuss the path forward for Onancock
  3. A meeting to review progress with payment plan contractor, PromisePay
  4. Architectural review of Lucas Creek Pump Station
  5. A site visit to Providence Road PRS and the Woodstock Park tank and skate park
  6. A SWIFT staff update
  7. Delinquent account mapping
  8. Welcomed participants to each Courageous Conversation session



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- C. **External Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted with an asterisk):
1. A meeting with Dominion Energy regarding a project in Chesapeake
  2. Multiple planning meetings for a WEF Young Professionals Workshop
  3. The monthly meeting of the Hampton Roads Planning District Commission (HRPDC) Director of Utilities Committee (DUC)
  4. The NACWA Awards Committee meeting to review Excellence in Management applications
  5. A meeting of the fundraising cabinet for the Elizabeth River Project's capital campaign
  6. The public hearings for expansion of the territory included within HRSD at Accomack and Northampton County Circuit Courts\*
  7. Attended several WEFTEC Connect virtual education sessions
  8. Multiple meetings of the US EPA's Environmental Financial Advisory Board (EFAB)
  9. A meeting to discuss Exmore options
  10. Chaired the US Water Alliance's One Water Council
  11. The Virginia Forever Bridge Builder event
  12. A meeting to discuss subdivision of the Riverside property in Nassawadox
  13. Conducted an interview with DELMARVA Now regarding the Eastern Shore expansion
  14. Participated in the US EPA WIFIA check presentation by the Administrator of US EPA\*
  15. Presented the NACWA Peak Performance Awards during the virtual NACWA 50<sup>th</sup> Anniversary Gala
- D. **Consent Decree Update:** No change from last month. The Commonwealth has signed off on the Fifth Amendment. The Amendment is at DOJ and EPA for final signatures before lodging with the Norfolk District Court. We anticipate final signatures and approval by the judge before year end.

The Virginia Supreme Court heard the briefs on the Nansemond Watermen appeal in early November. A decision is anticipated in Spring 2021.

The meeting next week will be another fully electronic meeting using Skype as we have done since April. The Governor has extended the declared state of emergency indefinitely and as such we will continue to meet in this fashion until that executive order is lifted.

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, November 24, 2020.**

Respectfully submitted,

Ted Henifin, P.E.  
General Manager

TO: General Manager  
 FROM: Director of Communications  
 SUBJECT: Monthly Report for October 2020  
 DATE: November 4, 2020





A. Publicity and Promotion

HRSD and/or SWIFT were mentioned or featured in 20 news stories and editorials on topics that included:

1. Woodstock Park skate park design reveal
2. HRSD securing EPA WIFIA funding for SWIFT
3. HRSD Top Forty under 40 honoree (Chris Wilson)
4. Hearings on Eastern Shore for communities joining HRSD

B. Social Media and Online Engagement

1. Metrics

Social Media Metrics October 2020				
METRIC	 FACEBOOK	 LINKEDIN	 TWITTER	 YOUTUBE
<b>Number of Posts</b> *number of published posts	34 +6	9 +7	33 +13	3:27 average view duration (up significantly from 1:35 in September)
<b>Number of Followers/Likes</b> *total number of fans	1,375 +7	5,063 +26	501 +10	200 +4
<b>Engagement</b> *sum of reactions comments and shares	565 -236	352 +273	89 +5	1,313 unique viewers -168
<b>Traffic</b> *total clicks on links posted	52 -82	487 +405	64 -1	5% click through -0.2%



## 2. Top posts on Facebook, Twitter and YouTube

### Top Facebook post

**HRSD** Published by Hrodulike [?] · October 8 ·

Have you heard about the benefits of SWIFT?

SWIFT is designed to:

- Help the Bay by significantly reducing the amount of nutrients such as nitrogen and phosphorus that HRSD discharges to the James, Elizabeth and York rivers;
- Replenish our dwindling groundwater supply, allowing this natural resource to remain productive for generations to come... See More

**1,196** People Reached **135** Engagements

Boost Post

### Top Tweet

**Top Tweet** earned 2,781 impressions

Congratulations to Christopher Wilson, HRSD Chief of Process Engineering and Research, 2020 Top 40 Under 40 honoree!  
[ow.ly/LWrB50BQI89](https://ow.ly/LWrB50BQI89)  
[pic.twitter.com/4LLaYvzDEH](https://pic.twitter.com/4LLaYvzDEH)

**HRSD congratulates its 2020 Top 40 Under 40 honoree, Christopher Wilson, Ph.D., P.E.**

An Chief of Process Engineering and Research, Christopher took a role only in providing public health and the waters of Hampton Roads while enhancing the quality of life through his commitment to his family, his community and his engineering projects.

HRSD is proud to have more than 800 internationally-recognized employees come from many backgrounds, but all share one vision: Future generations will benefit clean waterways and be able to keep them clean.

Visit [HRSD.com](https://www.hrwd.com) to learn more about rewarding career opportunities with the organization that has been making human impact on the environment for 80 years.

80 HRSD

5 3 30

### Top Videos

Video	Average view duration	Views
1 <b>The Wastewater Treatment Process</b> Oct 22, 2012	1:52 (58.7%)	487
2 <b>Atlantic Treatment Plant Cambi Tour</b> Oct 1, 2019	6:31 (39.3%)	370
3 <b>HRSD EPA WIFIA Loan Event for SWIFT (Sustainable Water Initiative For Tomorro...</b> Oct 13, 2020	6:20 (33.2%)	368
4 <b>What is Asset Management? Celebrating Infrastructure Week at HRSD</b> Sep 14, 2020	1:23 (53.6%)	201
5 <b>SWIFT Research Center: What is the Potomac Aquifer?</b> Jan 8, 2019	2:47 (60.4%)	85
6 <b>What is Asset Management? HRSD Celebrates Infrastructure Week   United For Is...</b> Sep 30, 2020	1:05 (42.5%)	50
7 <b>HRSD Thank You Video</b> Apr 29, 2016	1:17 (53.7%)	29
8 <b>SWIFT Research Center Ribbon Cutting Ceremony, May 2018</b> Jul 3, 2018	1:35 (55.4%)	28
9 <b>Amazing Aquifers: How To Make an Aquifer at Home</b> Apr 1, 2020	0:29 (71.2%)	27
10 <b>Overview of HRSD's Sustainable Water Initiative for Tomorrow Pilot Project</b> Nov 28, 2019	2:32 (65.1%)	26

### 3. Impressions and Visits

- a. Facebook: 15,193 page impressions, 12,247 post impressions reaching 11,004 users and Facebook engagement of 565 (458 reactions, 80 shares and 27 comments).
- b. Twitter: 16,100 tweet impressions; 245 profile visits and 33 mentions
- c. HRSD.com/SWIFTVA.com: 1,045 page visits
- d. LinkedIn Impressions: 13,281 page impressions and 13,299 post impressions
- e. YouTube: 1,975 views
- f. Next Door unique impressions: 738 post impressions
- g. Blog Posts: 1
  - (1) [Work for Water as a TSD Technician](#)
- h. Construction Project Page Visits – 1,247 total visits (not including direct visits from home page, broken down as follows:
  - (1) 783 visits to individual pages
  - (2) 464 to the status page

### C. News Releases, Advisories, Advertisements, Project Notices, Community Meetings and Project Websites

1. News Releases/Traffic Advisories/Construction Notices: 12 (8 construction notices, one Commission meeting notice, one new project announcement, one virtual open house notice, one news releases)
2. Advertisements: 0
3. Project Notices: 15 (via door hanging and mailings, reaching approximately 1,327 residents)
4. Project/Community Meetings: 2 (held virtually)
  - a. 10/20/20 – Citizen’s Advisory Committee meeting to present the 15<sup>th</sup> and 16<sup>th</sup> streets Sewer Replacement project in Newport News
  - b. Presentation/virtual open house for the Surry and Isle of Wight project was made available on HRSD.com for October; flyers were distributed to make residents aware and provide alternative form of receiving the information.

5. New Project Web Pages /Videos: 0

D. Special Projects and Highlights

1. Director and staff coordinated and executed an event with the Environmental Protection Agency (EPA) at the SWIFT Research Center highlighting HRSD's receipt of a historic EPA WIFIA loan for the full-scale implementation of SWIFT. The event was carefully developed to maintain COVID-19 safety measures, including limited attendance, physical distancing and mask wearing by 100% of attendees and participants. The event was recorded in its entirety and has been made available [here](#) on HRSD's YouTube channel.
2. Staff developed and launched resources and materials for virtual participation in World Teacher Outreach Day and Imagine a Day without Water.
3. Director and staff provided final input and assets for the SWIFT Research Center virtual tour. The tour will be made available on SWIFTVA.com by mid-November.
4. Staff attended the HRPDC askHRGreen water awareness and FOG meetings and the Virginia Water Environment Association (VWEA) Communications Committee meeting.
5. Community Outreach and Education Specialist attended the North American Association of Environmental Education Virtual Conference.
6. Director and SWIFT Program manager provided an interview and tour of the SWIFT Research Center to WHRO environment reporter.
7. Director, together with Director of Finance and Chief of Customer Care met with SIR Communications to review results of the 2020 Customer Satisfaction Survey. A presentation will be provided to the Commission at the November Commission meeting.

E. Internal Communications

1. Director participated in the following internal meetings and events:
  - a. Weekly Leadership and COVID-19 meetings
  - b. Woodstock Park interpretive sign development meetings
  - c. Stakeholder communication planning, website content review and locality coordination planning meetings for the Larchmont Sanitary Sewer Improvements Program
  - d. Part three of a three-part media training provided to HRSD staff
  - e. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and QST meetings

2. Director conducted biweekly communications department status meetings and weekly one-on-one staff check-in meetings.

F. Metrics

1. Educational and Outreach Activities: 2
  - a. World Teach Day Outreach Resources: 533 people reached; 9 clicks; 22 reactions, comments, and shares
  - b. Imagine A Day Without Water Outreach Resources: 184 people reached; 4 clicks; 13 reactions, comments, and shares
2. Number of Community Partners: 3
  - a. AskHRGreen
  - b. Elizabeth River Project
  - c. The Value of Water (VOW)
3. Additional Activities Coordinated by Communications Department: 0
4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	October 2020
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	12
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to-Date	Hours / #FTE	31.25
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Number of Community Partners	Number	3

Respectfully,

Leila Rice, APR  
 Director of Communications

TO: General Manager  
FROM: Director of Engineering  
SUBJECT: Engineering Monthly Report for October 2020  
DATE: November 13, 2020

A. General

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

CIP Spending (\$M):

	Current Period	FYTD
Actual	16.38	44.14
Plan	23.40	65.70

2. Members of the Engineering Department were actively involved in three virtual conferences held in October. WEFTEC was held virtually for the first time in its 93-year history. This event was totally virtual and was renamed WEFTEC Connect this year. Staff made a presentation that was pre-recorded and shown during the event. The Florida Groundwater Association Annual Conference was also a virtual event and staff made a presentation on HRSD's SWIFT Program. The presentation included both a pre-recorded portion and a live (Zoom-based) Q&A session. The Design-Build Institute of America also held its National Conference virtually. Staff made a presentation that was pre-recorded that also included a live chat option for those listening to the session. Although attending these events in person has many advantages, including the ability to see and discuss various equipment in the Exhibit Hall and network with the consultants and contractors that do business with HRSD, the time/cost savings associated with staying at home made this a beneficial trade off. Virtual trade conferences are a likely outcome through the first half of 2021.

B. Asset Management Division

1. The annual Force Main Failure Analysis Report was completed and reviewed in October. This report highlights all pipe failures in the past fiscal year and trends information from past years. The summary shows a consistent trend of cast-iron pipe failures with an increase in ductile-iron pipe problems and external corrosion failures of bolts used for certain pipe appurtenances. The level of failures has not increased in recent years and remains low for the age and length of pipe in service.

2. The Unvented High Spot Risk Analysis continued in October. Staff has found approximately 20 locations in the interceptor sewer system that are likely not vented. These unvented high spots have historically shown a likelihood for internal corrosion. A contractor is working with staff to verify these high spot locations in the field and to install air vents when appropriate. This is one of several preventative efforts to address possible pipe failures before they occur.

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

1. The York River Treatment Plant Headworks Effluent Pipe Rehabilitation project continued in October. This is part of an emergency repair resulting from a failure of this pipe in September. A temporary bypass system was installed and an inspection of the entire section of pipe determined that the concrete pipe had significant deterioration. Quotes to replace the pipe were received from three contractors and a contract has been awarded to Bridgeman Civil. The concrete pipe will be replaced with high-density polyethylene pipe which is resistant to internal or external corrosion. The bypass system will remain in place until the replacement pipe can be installed. This effort is anticipated to take three months to complete.
2. The Water Quality Services Building Phase II construction continues to make good progress. All exterior glass and most of the exterior finishes have been installed. The site work is approximately 80% complete. Most of the interior drywall is installed and painting has begun. The epoxy flooring system will be installed in the coming month. The interior equipment and office furniture is being ordered. The information technology systems and audiovisual equipment has been ordered and will be delivered soon. This project is being completed using a Design-Build procurement delivery approach and there is a strong collaborative mindset in play as we complete this project by all team members.
3. The SWIFT Full-Scale Implementation Team has begun planning the next SWIFT Industry Day. The event is scheduled for January 14, 2021. This year's event will be virtual with numerous enhancements from last year's program. We will take advantage of the latest virtual meeting technologies to deliver new information and a virtual tour of the SWIFT Research Center. A prime focus for this event will be discussion of current and future SWIFT projects and how engineers, contractors, vendors and suppliers can compete for this work. The event will also allow Small, Woman-Owned and Minority (SWaM) contractors to understand and network with others interested in this large program. HRSD's Procurement Division will also participate, informing firms new to HRSD how to bid on upcoming work.

#### D. Planning & Analysis Division

1. Staff has been coordinating a new professional services selection for the Inflow Reduction Program Phase I project. The Regional Wet Weather Program has determined several basins that have excessive inflow into the sewer system. This project will determine how to best pinpoint the problem areas and recommend methods to reduce inflow into the sewer system. The project will likely include both data analysis and field efforts to make the best possible decisions for future capital improvement projects and/or maintenance. A professional services firm recommendation will be made at the November Commission Meeting.
2. Staff completed mapping delinquent customer accounts across the region using HRSD's geographic information system (GIS). A "heat map" was generated that showed where delinquent accounts were physically located and the relative magnitude of these account balances. This information was shared with the Hampton Roads Planning District Commission to assist with planning and funding requests to external groups due to COVID-19 based financial challenges.

#### E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 4
  - a. 10/07/2020 – WEFTEC Connect presentation entitled, How to Deliver Progressive Projects in a Traditional, Fixed-Price Design-Build State.
  - b. 10/08/2020 – Florida Groundwater Association Annual Conference presentation entitled, Managed Aquifer Recharge and the Sustainable Water Initiative for Tomorrow.
  - c. 10/29/2020 – Design-Build Institute of America National Conference Panel Discussion entitled, The Use of Stipends for Water/Wastewater Projects.
  - d. 10/30/2020 – Design-Build Institute of America National Conference Panel Discussion entitled, The Value of Early Supply Chain Engagement in Design-Build.
2. Number of Community Partners: 3
  - a. Water Environment Federation
  - b. Florida Groundwater Association
  - c. Design-Build Institute of America
3. Number of Research Partners: 0

4. Monthly Metrics Summary:

<b>Item #</b>	<b>Strategic Planning Measure</b>	<b>Unit</b>	<b>October 2020</b>
M-1.4a	Total Training Hours per Full Time Employee (44) - Current Month	Hours / #FTE	3.30
M-1.4b	Total Training Hours per Full Time Employee (44) - Cumulative Fiscal Year-to-Date	Hours / #FTE	7.75
M-5.2	Educational and Outreach Events	Number	4
M-5.3	Number of Community Partners	Number	3
M-5.4	Number of Research Partners	Number	0

Bruce W. Husselbee, P.E.

Bruce W. Husselbee, P.E.



TO: General Manager

FROM: Director of Finance

SUBJECT: Monthly Report for October 2020

DATE: November 10, 2020

A. General

1. HRSD held a Water Infrastructure Finance and Innovation Act (WIFIA) check presentation ceremony with the Environmental Protection Agency (EPA) Administrator on October 13. This may be the first time the EPA Administrator has visited HRSD, which highlights the importance of the SWIFT project and the historic size of the WIFIA loan.
2. Water consumption has bounced back from the start of the fiscal year, but this is likely due to contracted water meter reading that many localities utilize. We understand that many readings were delayed and localities were using estimated readings during this period. As a reminder, the Wastewater Revenues appear to be above budget, but this represents billed revenue, not cash-based received revenue. This is offset by the HRSD Accounts Receivable Aging Beyond Current, since many customers continue to struggle paying bills and the moratorium on shut-offs continues throughout the region until the General Assembly approves the Municipal Utility Relief bill. With the moratorium, fees associated with shut-offs will continue to fall below budget. Facility Charges remain strong with the strength in the housing market. Interest Income will likely fall well below budget as the interest rate has dropped from over two percent early in the year to 0.18 percent. Expenses continue to be in-line or below budget. Debt Service payments are not linear and appear over budget, but this will normalize in the coming months. Overall, revenues continue to exceed expenses, including the Accounts Receivable Aging beyond 60 days that is approximately \$12 million.
3. In October, HRSD went "Live" with a successful upgrade to our Customer Care and Billing (CC&B) system. Special thanks to the talented project team and staff from Customer Care Center and Information Technology whose involvement contributed to the completion of this project. Implementation of such a complex system requires dedication, careful planning and outstanding teamwork.
4. The Quarterly investment summary for [HRSD's Operating Cash Strategies and Retiree Health Trust \(OPEB\)](#) is attached. HRSD's investments in the Virginia Investment Pool Liquidity Pool and one to three-year High-Quality Bond Fund continues to meet or exceed their benchmarks. The Retirement Health Trust returned 5.92 percent for the quarter above the benchmark at 5.18 percent. The one-year trailing return significantly outperformed the benchmark at 12.46 percent vs 9.90 percent.

## B. Interim Financial Report

### 1. Operating Budget for the Period Ended October 31, 2020

	Amended Budget	Current YTD	Current YTD as % of Budget (33% Budget to Date)	Prior YTD as % of Prior Year Budget
<b>Operating Revenues</b>				
Wastewater	\$ 312,218,000	\$ 112,096,757	36%	36%
Surcharge	1,522,000	560,878	37%	39%
Indirect Discharge	3,200,000	1,071,207	33%	40%
Fees	3,020,000	700,684	23%	36%
Municipal Assistance	700,000	265,862	38%	32%
Miscellaneous	1,165,000	508,551	44%	70%
Total Operating Revenue	<u>321,825,000</u>	<u>115,203,939</u>	36%	36%
<b>Non Operating Revenues</b>				
Facility Charge	6,160,000	2,748,485	45%	35%
Interest Income	1,510,000	282,861	19%	56%
Build America Bond Subsidy	2,292,000	-	0%	47%
Other	610,000	193,354	32%	33%
Total Non Operating Revenue	<u>10,572,000</u>	<u>3,224,700</u>	31%	43%
<b>Total Revenues</b>	332,397,000	118,428,639	36%	36%
Transfers from Reserves	28,765,873	23,974,068	83%	33%
<b>Total Revenues and Transfers</b>	<u>\$ 361,162,873</u>	<u>\$ 142,402,707</u>	39%	36%
<b>Operating Expenses</b>				
Personal Services	\$ 60,952,502	\$ 20,535,338	34%	35%
Fringe Benefits	24,945,953	8,190,249	33%	34%
Materials & Supplies	9,663,402	2,476,595	26%	29%
Transportation	1,579,254	302,614	19%	26%
Utilities	13,019,361	3,659,740	28%	26%
Chemical Purchases	10,500,337	2,696,805	26%	26%
Contractual Services	51,831,008	11,592,452	22%	23%
Major Repairs	13,076,208	2,032,591	16%	15%
Capital Assets	867,079	233,051	27%	0%
Miscellaneous Expense	3,721,391	1,041,137	28%	67%
Total Operating Expenses	<u>190,156,495</u>	<u>52,760,572</u>	28%	29%
<b>Debt Service and Transfers</b>				
Debt Service	61,407,822	25,756,820	42%	43%
Transfer to CIP	109,338,556	46,036,480	42%	33%
Transfer to Risk management	260,000	86,668	33%	33%
Total Debt Service and Transfers	<u>171,006,378</u>	<u>71,879,968</u>	42%	37%
Total Expenses and Transfers	<u>\$ 361,162,873</u>	<u>\$ 124,640,540</u>	35%	33%

## 2. Notes to Interim Financial Report

The Interim Financial Report summarizes the results of HRSD's operations on a basis of accounting that differs from generally accepted accounting principles. **Revenues are recorded on an accrual basis, whereby they are recognized when billed**, and expenses are generally recorded on a cash basis. No provision is made for non-cash items such as depreciation and bad debt expense.

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

Transfers represent certain budgetary policy designations as follows:

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

## 3. Reserves and Capital Resources (Cash and Investments Activity) for the Period Ended October 31, 2020

### HRSD - RESERVE AND CAPITAL ACTIVITY

October 31, 2020

	General Reserve			Capital		
	General		Risk Mgmt Reserve	Reserve	Paygo	Debt Proceeds
	Unrestricted	Restricted	Unrestricted	Unrestricted	Unrestricted	Restricted
<b>Beginning - July 1, 2020</b>	<b>\$ 198,874,822</b>	<b>\$ 28,154,541</b>	<b>\$ 3,759,535</b>	<b>\$ 15,266,324</b>	<b>\$ 22,209,680</b>	<b>\$ -</b>
<b>Current Year Sources of Funds</b>						
<b>Current Receipts</b>	112,119,893					
Capital Grants					-	
VRA Draws					12,578,045	
Bond Proceeds (includes interest)						
Days Cash on Hand Transfer In					14,385,444	
Transfers In			86,668		31,651,036	
<b>Sources of Funds</b>	<b>112,119,893</b>	<b>-</b>	<b>86,668</b>	<b>-</b>	<b>58,614,525</b>	<b>-</b>
<b>Total Funds Available</b>	<b>\$ 310,994,715</b>	<b>\$ 28,154,541</b>	<b>\$ 3,846,203</b>	<b>\$ 15,266,324</b>	<b>\$ 80,824,205</b>	<b>\$ -</b>
<b>Current Year Uses of Funds</b>						
Cash Disbursements	85,267,167				71,926,311	
Days Cash on Hand Transfer Out	14,385,444					
Transfers Out	31,737,704					
<b>Uses of Funds</b>	<b>131,390,315</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>71,926,311</b>	<b>-</b>
<b>End of Period - October 31, 2020</b>	<b>\$ 179,604,400</b>	<b>\$ 28,154,541</b>	<b>\$ 3,846,203</b>	<b>\$ 15,266,324</b>	<b>\$ 8,897,894</b>	<b>\$ -</b>

Unrestricted Funds \$ 207,614,821

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended October 31, 2020

**HRSD - PROJECT ANALYSIS**

October 31, 2020

Classification/ Treatment Service Area	Appropriate Funds	Expenditures prior to 7/1/2020	Expenditures Year to Date FY2021	Total Project Expenditure	Encumbrances	Available Funds
Administration	31,697,240	15,311,775	4,188,224	19,499,999	7,738,489	4,458,752
Army Base	154,434,000	123,095,232	-	123,095,232	2,368,191	28,970,577
Atlantic	111,997,296	76,678,241	1,084,007	77,762,248	6,759,711	27,475,337
Boat Harbor	178,337,498	35,978,245	1,165,972	37,144,217	19,500,116	121,693,165
Ches-Eliz	164,257,309	67,770,653	14,920,537	82,691,190	40,775,820	40,790,299
James River	262,016,867	38,423,787	1,986,749	40,410,536	3,570,221	218,036,110
Middle Peninsula	60,161,276	10,774,465	745,667	11,520,132	6,992,621	41,648,523
Nansemond	336,262,785	23,298,186	4,442,619	27,740,805	17,546,525	290,975,455
Surry	45,747,598	10,910,083	1,409,305	12,319,388	27,210,157	6,218,053
VIP	294,870,674	178,713,857	2,409,764	181,123,621	3,371,893	110,375,160
Williamsburg	34,145,622	17,684,308	5,179,629	22,863,937	9,036,277	2,245,408
York River	58,404,843	26,692,416	849,168	27,541,584	1,096,200	29,767,059
General	646,737,050	155,608,758	5,878,901	161,487,659	47,041,825	438,207,566
	<u>2,379,070,058</u>	<u>780,940,006</u>	<u>44,260,542</u>	<u>825,200,548</u>	<u>193,008,046</u>	<u>1,360,861,464</u>

5. Debt Management Overview

**HRSD - Debt Outstanding (\$000's)**

October 31, 2020

	Principal Sept 2020	Principal Payments	Principal Draws	Principal Oct 2020	Interest Payments
<b>Fixed Rate</b>					
Senior	\$ 206,906	\$ -	\$ -	\$ 206,906	\$ -
Subordinate	551,452	(1,458)	1,963	551,957	(2,118)
<b>Variable Rate</b>					
Subordinate	50,000	-	-	50,000	(3)
<b>Line of Credit</b>					
<b>Total</b>	<u>\$ 808,358</u>	<u>\$ (1,458)</u>	<u>\$ 1,963</u>	<u>\$ 808,863</u>	<u>\$ (2,121)</u>

**HRSD- Series 2016VR Bond Analysis**

October 30, 2020

	SIFMA Index	HRSD	Spread to SIFMA
Maximum	4.71%	4.95%	0.24%
Average	0.50%	0.55%	0.05%
Minimum	0.01%	0.01%	0.00%
As of 10/30/20	0.12%	0.12%	0.00%

\* Since October 20, 2011 HRSD has averaged 55 basis points on Variable Rate Debt

## 6. Financial Performance Metrics for the Period Ended October 31, 2020

### HRSD - UNRESTRICTED CASH

October 31, 2020

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

		Days Cash on	
		Hand	Days Cash on Hand
Total Unrestricted Cash	\$ 207,614,821		399
Risk Management Reserve	\$ (3,846,203)	(8)	391
Reserve	\$ (15,266,324)	(29)	362
Capital (PAYGO only)	\$ (8,897,894)	(17)	345
<b>Adjusted Days on Cash</b>	<b>\$ 179,604,399</b>		<b>345</b>

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

October 31, 2020

Primary Source	Beginning	YTD			Ending	Allocation of Funds	Credit Quality	Current Mo Avg Yield
	Market Value	Contributions	Withdrawals	Income Earned	Market Value			
	July 1, 2020				October 31, 2020			
BAML Corp Disbursement Account	7,339,242	170,677,742	164,120,777	8,295	13,904,502	8.8%	N/A	0.55%
VIP Stable NAV Liquidity Pool	178,660,390	10,000,000	45,000,000	137,473	143,797,863	91.2%	AAAm	0.19%
<b>Total Primary Source</b>	<b>\$ 185,999,632</b>	<b>\$ 180,677,742</b>	<b>\$ 209,120,777</b>	<b>\$ 145,768</b>	<b>\$ 157,702,365</b>	<b>100.0%</b>		

Secondary Source	Beginning	YTD			Ending	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
	Market Value	Contributions	Withdrawals	Income Earned & Realized G/L	Market Value			
	July 1, 2020				October 31, 2020			
VIP 1-3 Year High Quality Bond Fund	64,899,667	-	4,328	320,719	65,025,458	63,052,930	1,972,528	
<b>Total Secondary Source</b>	<b>\$ 64,899,667</b>	<b>\$ -</b>	<b>\$ 4,328</b>	<b>\$ 320,719</b>	<b>\$ 65,025,458</b>	<b>\$ 63,052,930</b>	<b>\$ 1,972,528</b>	

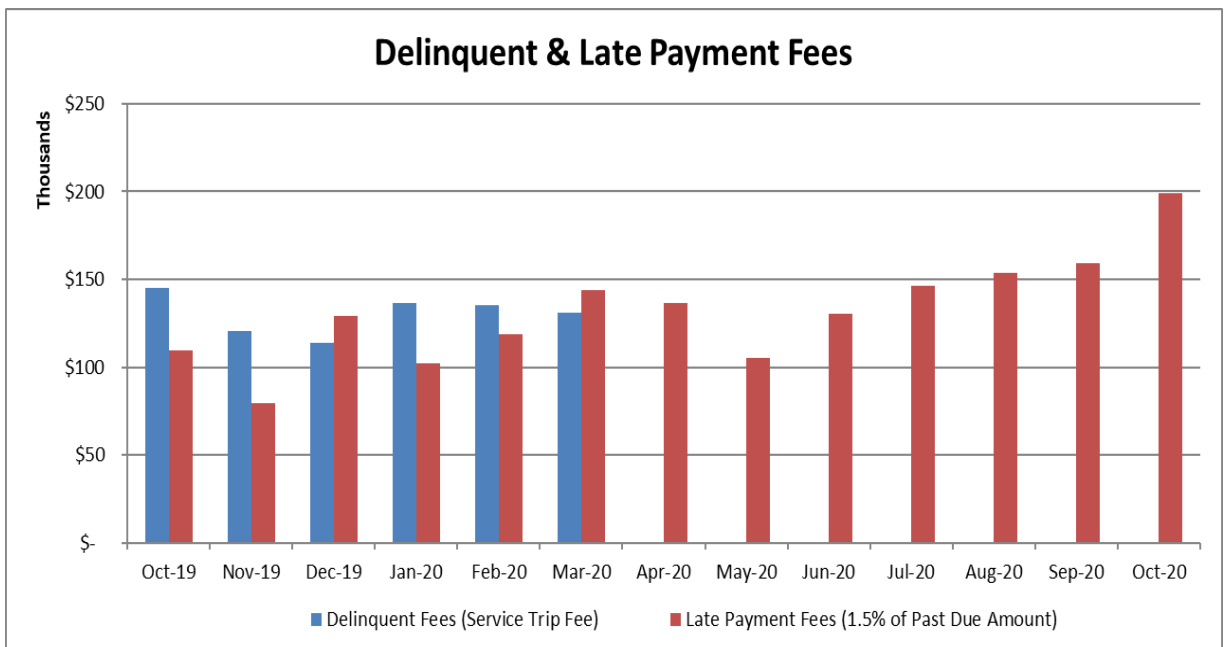
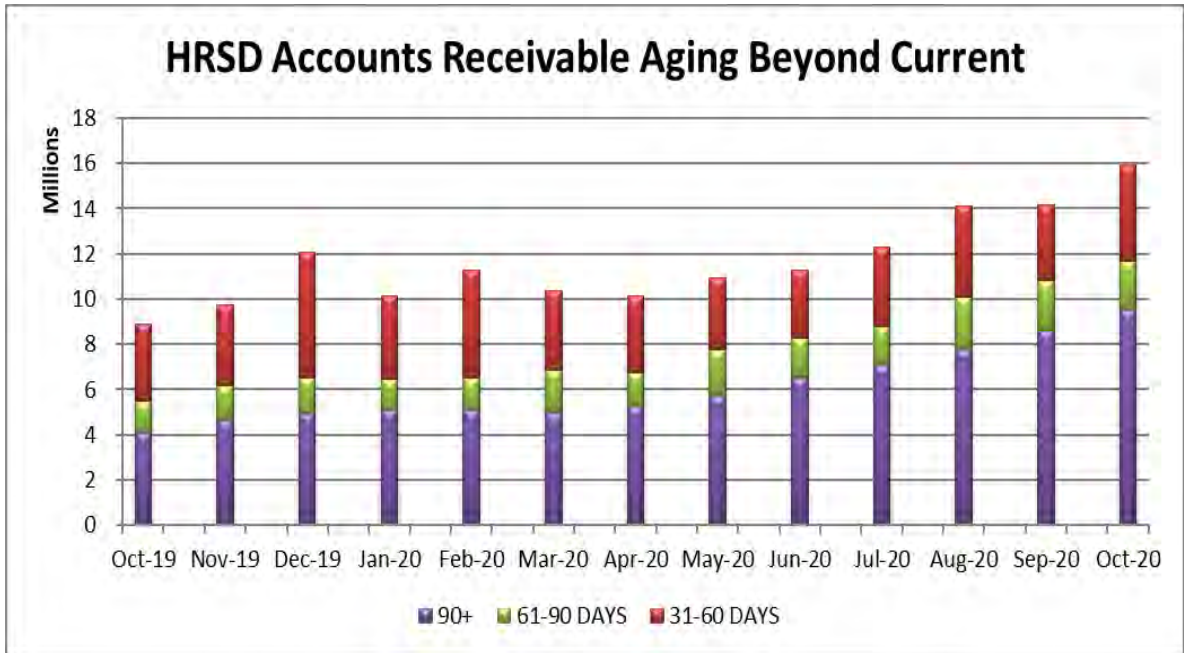
	Total	Fund Alloc
Total Primary Source	\$ 157,702,365	70.8%
Total Secondary Source	\$ 65,025,458	29.2%
<b>TOTAL SOURCES</b>	<b>\$ 222,727,823</b>	<b>100.0%</b>

## 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	-	N/A	23,092	N/A	23,160	N/A
Dec	27,268	-	N/A	27,518	N/A	27,383	N/A
Jan	31,818	-	N/A	32,101	N/A	31,920	N/A
Feb	36,287	-	N/A	36,005	N/A	36,236	N/A
March	39,495	-	N/A	40,108	N/A	40,223	N/A
Apr	43,441	-	N/A	44,246	N/A	44,387	N/A
May	47,762	-	N/A	48,397	N/A	48,604	N/A
June	52,222	-	N/A	52,535	N/A	52,869	N/A

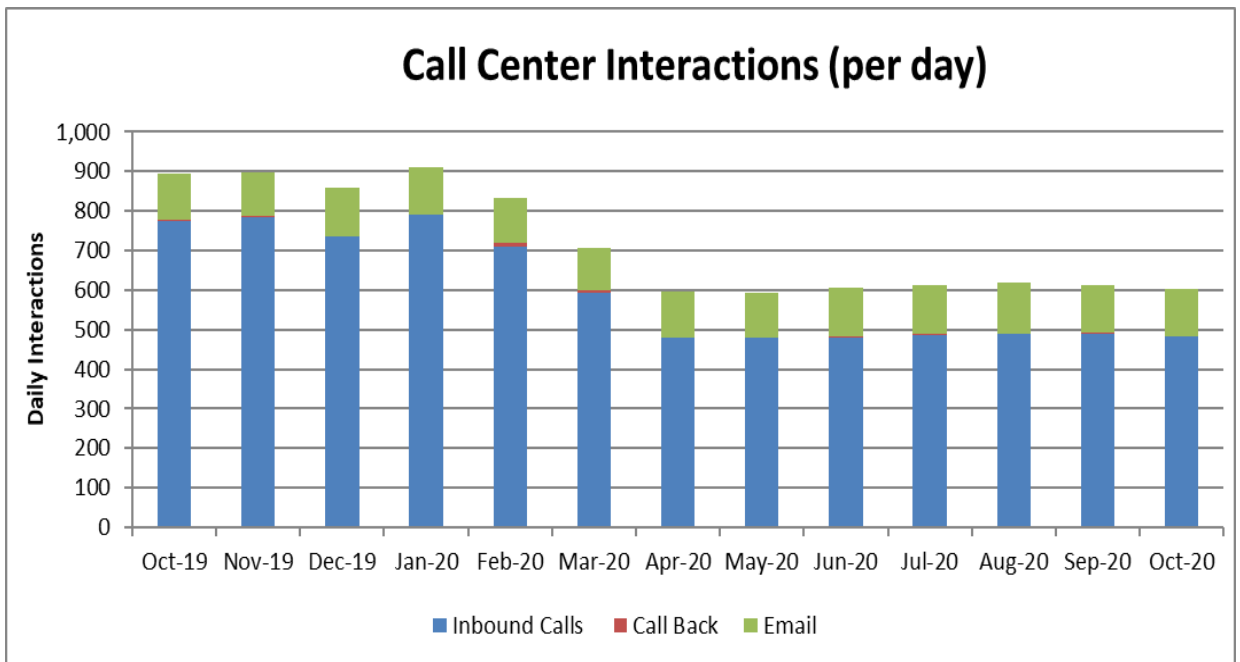
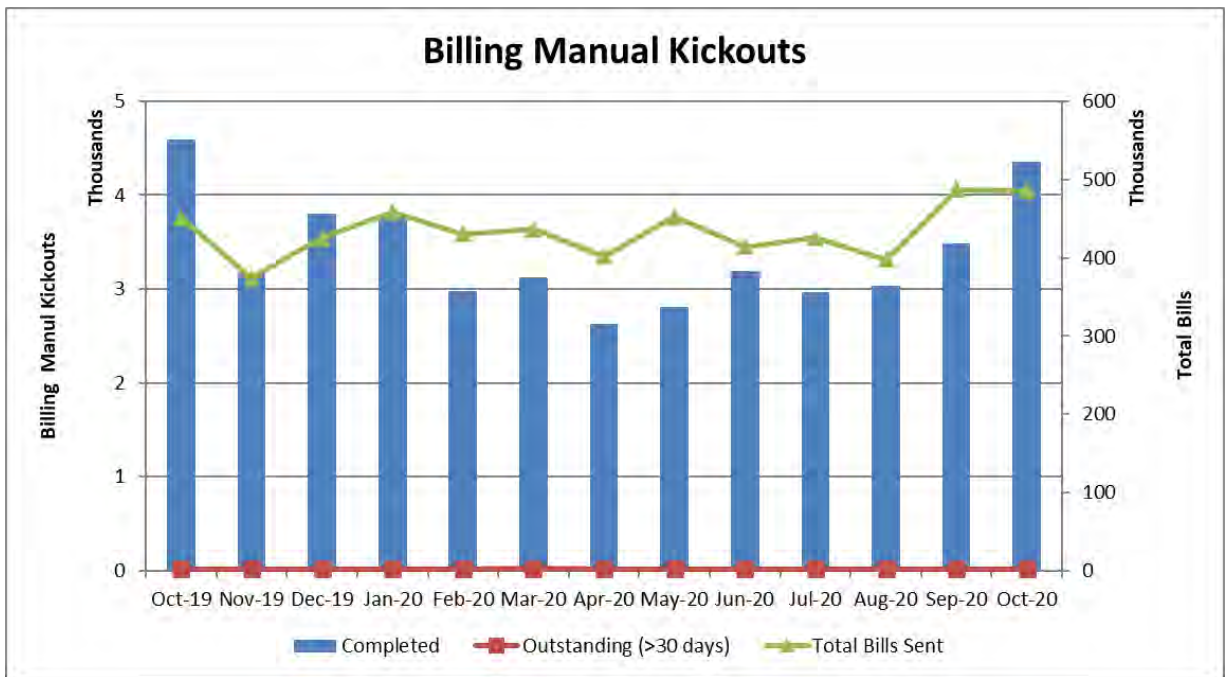
C. Customer Care Center

1. Accounts Receivable Overview



Apr-Oct 20 Field Activity was suspended late March in response to COVID-19

## 2. Customer Care Center Statistics



Customer Interaction Statistics	May	Jun	Jul	Aug	Sep	Oct
Calls Answered within 3 minutes	95%	97%	97%	98%	95%	95%
Average Wait Time (seconds)	0:28	0:18	0:26	0:17	0:28	0:25
Calls Abandoned	4%	3%	3%	3%	3%	3%

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
<b>Total</b>	<b>8</b>	

\***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	October 2020
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	0.94
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	4.81
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	109%
	General Reserves	Percentage of Operating Budget less Depreciation	109%
	Liquidity	Days Cash on Hand	399 Days
	Accounts Receivable (HRSD)	Dollars	\$32,884,361
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	29%



4. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2020
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	5%
M-4.3	Labor Cost/MGD	Personal Services + Fringe Benefits/365/5-Year Average Daily Flow	\$1,487
M-4.4	Affordability	6.5 CCF Monthly Charge/Median Household Income <sup>1</sup>	0.71%
M-4.5	Operating Cost/MGD	Total Operating Expense /365/5-Year Average Daily Flow	\$4,048
	Billed Flow	Percentage of Total Treated	78%
	Senior Debt Coverage	Cash Reserves/ Senior Annual Debt Service	5.80%
	Total Debt Coverage		2.81%

Respectfully,  
*Jay A. Bernas*  
 Jay A. Bernas, P.E.  
 Director of Finance

Attachment: [HRSD's Operating Cash Strategies and Retiree Health Trust \(OPEB\)](#)

<sup>1</sup> Median Household Income is based on September 28, 2020 [article](#)

**Hampton Roads Sanitation District**  
**Quarterly Performance Report**  
**For the Quarter Ending September 30, 2020**

## Total Portfolio Summary

<b>Operating Strategies</b>	<b>September 30, 2020</b>	<b>June 30, 2020</b>
Primary Source	\$ 170,462,368	\$ 185,999,632
Secondary Source	65,027,478	64,899,667
	<b>\$ 235,489,846</b>	<b>\$ 250,899,299</b>

## Primary Source Summary

The Primary Source Portfolio consists of BAML Corp Disbursement Account \$11.69m and VaCo/VML VIP Stable NAV Liquidity Pool \$158.77m. BAML Corp Disbursement Account returned 0.55% for the quarter ending September 30, 2020. VIP LIQ Pool Fund 30 Day Avg Net Yield was 0.22% as of September 30, 2020, which was equal the benchmark, LGIP 30 Day Avg Net Yield, performance. VaCo/VML VIP Stable NAV Liquidity Pool's weighted average credit rating was A-1 for the quarter.

## Secondary Source Summary

The Secondary Source Portfolio consists of VaCo/VML VIP 1-3 Year High Quality Bond Fund. The VIP 1-3 Yield to Maturity at Market was 0.23% as of September 30, 2020, which out performed the benchmark, ICE BofA ML 1-3 Yr AAA-AA Corp/Gov Index, by 0.07%. The weighted average credit rating for VaCo/VML VIP 1-3 Year High Quality Bond Fund's portfolio was AA for the quarter.

<b>Retirement Health Plan Trust</b>	<b>September 30, 2020</b>	<b>June 30, 2020</b>
Investment Assets	60,592,596	56,825,603
Liquidity Assets	6,625	86,808
Combined Assets	<b>\$ 60,599,221</b>	<b>\$ 56,912,411</b>

## Retiree Health Plan Trust Summary

The Retiree Health Plan Trust portfolio returned 5.92% (investment assets) for the quarter ended September 30, 2020, above the 5.18% return of the Blended Benchmark.\* The one-year trailing return for the Retiree Health Plan Trust portfolio was 12.46% compared to the Blended Benchmark return of 9.90%. As of September 30, 2020, the weighted average credit quality of fixed income holdings for the Retiree Health Plan Trust portfolio was A. Over the quarter, adjustments were made to increase international equity tactical allocations and reduce fixed income allocations. This resulted in a slight underweight to fixed income and a slight overweight to equity.

\*Performance is unreconciled and does not include funds from Boyd Watterson.

TO: General Manager  
FROM: Director of Information Technology  
SUBJECT: Information Technology Department Report for October 2020  
DATE: November 10, 2020

A. General

1. Staff continues working with Gartner Consulting in developing an IT security and governance master plan as well as a comprehensive analysis of existing network infrastructure and computing platforms to identify opportunities for enhanced reliability, data security, and future scalability.
2. Following many months of planning, coordination, and testing, the Customer Care and Billing System (CC&B) upgrade is now complete.
3. The new Oracle Field Services Cloud (OFSC) platform went live, replacing the previous mobile workforce management system. As a jurisdictional partner which also uses our instance of CC&B, the City of Suffolk also went live with OFSC.
4. Staff worked with members of the Finance Department to modify the Track-IT helpdesk software to incorporate work orders related to the Unifier project management platform.
5. Staff continues working with Marathon Consulting and the SharePoint Governance Team on the migration to SharePoint Online. Expected go-live date remains on schedule for December 2020.
6. Staff continues project work on the SharePoint site buildout for content related to OneDrive, Teams, SharePoint Online, and Power BI, for the future rollout of these cloud-based Microsoft products.

B. Strategic Planning Metrics Summary

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

<b>Item #</b>	<b>Strategic Planning Measure</b>	<b>Unit</b>	<b>October 2020</b>
M-1.4a	Training During Work Hours Per Full-Time Employee (50) – Current Month	Total Training Hours / # FTE	0.56
M-1.4b	Total Training During Work Hours Per Full-Time Employee (50) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	7.01
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 October 2020  
 DATE: November 8, 2020

A. Energy Management (EM)

In September 2017, the Commission adopted a goal to reduce HRSD’s greenhouse gas (GHG) emissions to 30 percent of 2005 levels. The three main contributors to GHGs are mobile sources (truck fleet), stationary sources (incinerators and generators) and purchased electricity (Figure 1). The GHGs for Fiscal Year 2020 (FY20) decreased 1.3 percent. Stationary combustion increased 6 percent but was offset by reductions in purchased electricity of 2.4 percent and mobile combustion of 1.6 percent, resulting in lower GHGs and a smaller carbon footprint.

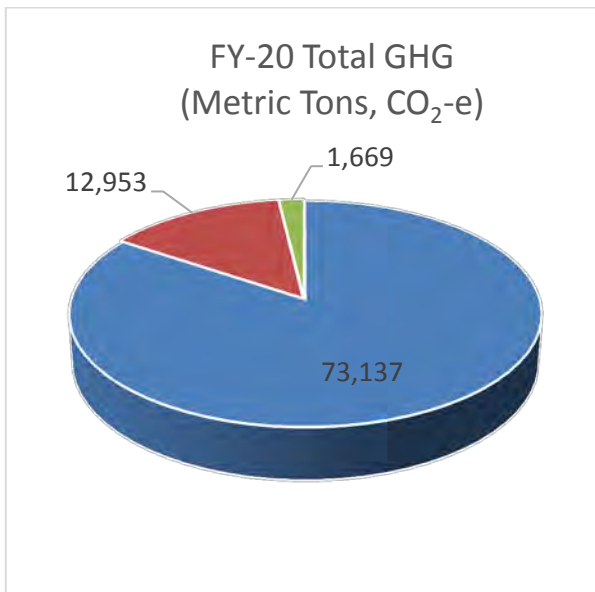


Figure 1

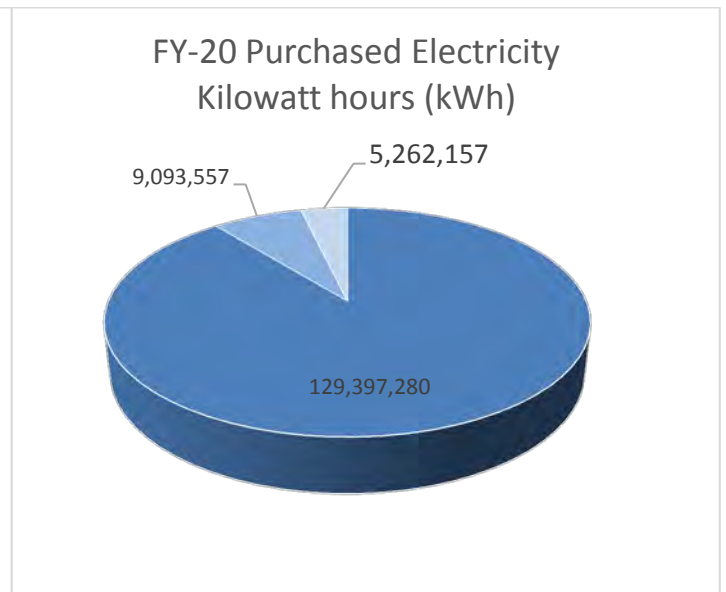
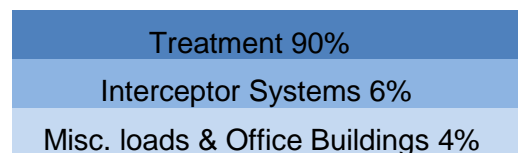
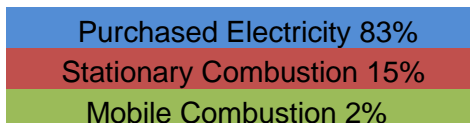


Figure 2



Purchased electricity (kilowatt-hours (kWh)) continues to represent the majority (83%) of total GHG contributions (Figure 1) and treatment continues to use the majority of purchased electricity (90%, Figure 2). Treatment’s consumption increased less than 1 percent this year and was offset by decreases in

interceptor pump station and office building/miscellaneous loads at 11 percent and 1.4 percent, respectively. Overall consumption decreased 2.4 percent in FY20 which saved 3.5 million kWhs and \$200,000.

HRSD's Strategic Carbon Footprint Reduction Team continues to look for opportunities to reduce GHG emissions. The following projects will provide opportunities to improve the efficiency of systems and subsequently, help reduce the GHG emissions:

- Installing a photo voltaic (solar) array at North Shore (NS) Operations (OPS) in January
- Actively investigating other solar array opportunities
- Shutting down the Army Base Treatment Plant (ABTP) incinerator
- Improving the efficiency of our aeration systems
- Closing Chesapeake-Elizabeth Treatment Plant (CETP)
- Repurposing Boat Harbor Treatment Plant (BHTP)

While these conservation and energy efficiency efforts can help us achieve some of the GHG reduction goals, we are also purchasing green power from Dominion Energy Virginia (DEV), which is produced or purchased by DEV and wheeled through the power grid to our facilities to help offset our power consumption and meet our reduction goals. We will spend \$116,000 in FY21 (.002/kWh) to purchase 58 million kWh to offset our GHG emissions. The purchase of green power continues to be an attractive opportunity to reduce GHGs.

## B. Interceptor Systems

### 1. North Shore (NS) Interceptor Systems

- a. A Sanitary Sewer Overflow (SSO) occurred when a 20-inch asbestos-cement force main failed. The cause of the failure was corroded hardware on a full circle repair clamp. This repair clamp was part of the original installation. Restoration of the area is now complete. An estimated 34,075 gallons of sewage was lost.
- b. There were seven system alarms during the month. All system alarms were promptly and fully resolved by staff.

### 2. South Shore (SS) Interceptor Systems

- a. On October 1, the Virginia International Gateway (VIG) terminal reported a problem with their private pump station. Staff observed higher than normal pressures on the interceptor pipeline that

connected to VIG's force main. A contractor cleared two blockages in the interceptor pipeline and reestablished service.

- b. On October 21, Virginia Maritime Association (VMA) reported sewage odors in their commercial building that also houses HRSD's Plume Street Pump Station (PS). At the time, staff was using a blower while working in the station. In the future and when practical, staff will conduct work in the station when the VMA office is closed.

## C. Major Treatment Plant Operations

### a. 1. Army Base Treatment Plant (ABTP)

- a. Staff optimized centrifuge operation by running in torque mode, producing a better dewatered solid thus helping burn temperatures in the incinerator.
- b. Staff optimized incinerator operation by tuning burners, induced draft fan, and scrubber venturi. This will greatly reduce temperature swings, limiting the number of permit deviations.

### 2. Atlantic Treatment Plant (ATP)

- a. An overflow at the Acid Phase Digester occurred on October 8. Although, the level indicator was reading the liquid level correctly, it could not read the foam. Approximately 5,000 gallons spilled onto the ground. 4,500 gallons were recovered.
- b. A gas line became plugged on October 13, resulting in another overflow at the Acid Phase Digester. All 300 gallons spilled were recovered.
- c. Start-up efforts associated with the Thermal Hydrolysis Process (THP) continue. The feed to THP digesters #1 & #2 was slowly increased throughout the month. All solids were fully processed through the THP by the end of the month and staff was able to take the Acid Phase and the class B biosolids digesters offline.

### 3. Boat Harbor Treatment Plant (BHTP)

Contractors completed repairs on the leaking sidewall to #5 secondary clarifier. Staff began installing new draft tubes and plan to test the repairs in November.

4. Chesapeake-Elizabeth Treatment Plant (CETP)

Biological Phosphorus Removal (BioP) continues with no chemical addition for phosphorus removal necessary.

5. James River Treatment Plant (JRTP)

- a. A wastewater event occurred when a pipe failed and 1,200 gallons of centrifuge centrate spilled, half of which was not recovered.
- b. Staff continued operating the Moving Bed Bio Reactor (MBBR) pilot. Preliminary results show a good growth of annamox bacteria on the conditioned media and growth showing up on the virgin media. Results of the study will be used to determine the most effective method for starting up the MBBR planned in the JRTP upgrade. With growth on the virgin media, startup of the MBBR may be with virgin media instead of transferring conditioned media.

6. Nansemond Treatment Plant (NTP)

- a. A mechanical failure of the Hydrograv inlet on Secondary Clarifier #5 occurred in late October. Staff and contractors will begin troubleshooting the cause and develop a plan for repair in early November.
- b. SWIFT Research Center (SWIFT RC)
  - (1) The total volume of SWIFT recharge into the Potomac aquifer for the month of October was 25.6 MG (82% Recharge Time).
  - (2) Staff began using the new carbon media installed in September on granular activated carbon (GAC) vessel #1. Flow split going to the GAC vessels is 10 percent/90 percent with most of the flow going through GAC #2. This mode of operation helped to maintain the total organic carbon (TOC) below the proposed regulatory limit of 4 mg/L.

7. Virginia Initiative Plant (VIP)

- a. There was one reportable odor control event for two hourly average outlet hydrogen sulfide levels higher than 2 parts per million at the headworks odor control station.
- b. Staff received a draft report indicating that it had passed air permit compliance testing on Incinerator 2.



8. Williamsburg Treatment Plant (WBTP)

- a. A contractor spilled 100 gallons from a vacuum truck during grit removal operations at the headworks, half of which was not recovered.
- b. Staff completed work on constructing new, fiberglass baffle walls, installing a larger nitrified recycle line and replacing diffusers in aeration tank #3.

9. York River Treatment Plant (YRTP)

- a. Testing of nutrient removal through filtration on the pilot plant continued with good growth of annamox bacteria on filter media. Partial denitrification with annamox shows promise for being a good operating strategy when combined with controls on the aeration tanks.
- b. The bypass pipe from the headworks to the primary clarifiers continues to pump headworks effluent from the grit and pre-aeration tanks to the primary clarifier distribution chamber using four pumps.

10. Incinerator Operations Events Summary

Total hydrocarbon (THC) monthly averages (not to exceed 100 parts per million) were met by all five incinerator plants. Certified TCH data capture for the month exceeded 95 percent for all five facilities.

There were three deviations from the minimum operating parameters and seven minor (less than 60 minute) non-reportable bypass events.

D. Small Communities (SC)

1. Middle Peninsula Small Communities Treatment and Collections

a. West Point System

Staff excavated and replaced service lateral and a section of the gravity main at 19<sup>th</sup> and Lee Street.

b. King William System

An SSO occurred on October 26 when a pump station discharge valve bonnet broke at the Central Crossing Pump Station in Aylett (King William County). The area was excavated after the station was isolated and the discharge line repaired. Approximately 3,000 gallons soaked into the ground draining to Moncuin Creek.

c. Mathews System

There were several issues with the vacuum system this month. All were related to valves in the system not operating properly. A couple of these instances resulted in backups. One backup caused damage to flooring and lower wall areas of a nearby residence. Staff cleaned and inspected the above grade wet well tanks on the transmission force main stations. Staff also began modifying air intakes attached to the vacuum pits to mitigate future backups.

2. Small Communities – Surry Systems

One of the two drum-style micro screens for the town treatment plant was found to have a broken drive sprocket. While replacing the drive sprocket, the contractor making the repair also identified that the main sprocket is worn and needs replacing. A new one was ordered and will be replaced soon.

3. Small Communities – Lawne's Point

Both ponds were drained of rainwater and now have a significant freeboard available for winter precipitation. Pond 1 discharge ended on October 7 and Pond 2 discharge ended on October 15. Both ponds are now at 94-inches and have a significant freeboard available for winter precipitation.

E. Electrical & Instrumentation (E&I)

1. Staff designed, built, and installed a continuous analysis system that is currently monitoring  $PO_4$  concentrations in the force main at Pughsville Road Pressure Reducing Station (PRS). This system was created to determine the cause of ongoing monthly spikes in phosphorous levels at NTP.
2. Staff worked with an electrical contractor to install conduit and wire for an alarm horn on the exterior of the chemical building at VIP. The alarm will notify staff of a potential chemical leak inside the building before entering.

3. Staff installed a program for dissolved oxygen (DO) control at WBTP. The control modifications were made for all four aeration tanks in cells 3 and 5B. These modifications allow operators to enter a setpoint and maintain the DO in the cells by controlling the blower actuator at each location based on the cell's DO value.

F. Water Technology and Research

Improving 1,4-dioxane removal is an important aspect of SWIFT, both for the Research Center and the design of full-scale SWIFT facilities. The application of propane for enhancing co-metabolic removal of 1,4-dioxane through biofiltration at the pilot scale has been successful, and this work is continuing with a number of research questions remaining. Since this is such a promising technology from a capital and operating cost standpoint, we decided to move forward with full-scale pilot testing at the Research Center. A system has been designed to safely feed propane to two of the four parallel biofilters at the SWIFT Research Center. Equipment purchase and construction will proceed over the next few months, and testing will begin as soon as possible.



## H. Strategic Measurement Data

### 1. Education and Outreach Events: 7

- a. 10/5/2020: WEFTEC – Samantha Hogard presentation on SWIFT
- b. 10/5/2020: WEFTEC – Stephanie Klaus presentation on Partial Denitrification-Anammox
- c. 10/5/2020: WEFTEC – Charles Bott presentation on Low DO Operation
- d. 10/5/2020: WEFTEC – Kester McCullough presentation on Theoretical Aspects of Nitrogen Removal
- e. 10/5/2020: WEFTEC – Stephanie Klaus presentation on Simultaneous Nitrification-Denitrification
- f. 10/5/2020: WEFTEC – Sarah Schoepflin presentation on Partial Denitrification-Anammox
- g. 10/15/2020: International Ozone Association Webinar – Charles Bott and Mack Pearce presentation on SWIFT

### 2. Community Partners: 3

- a. Chesapeake Bay Foundation – oyster cage maintenance at BHTP for oyster gardening program
- b. United Way
- c. DOE Jefferson Lab

### 3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	October 2020
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (526) – Current Month	Hours / FTE	2.34
M-1.4b	Total Training During Work Hours per FTE (526) – Cumulative Year-to-Date	Hours / FTE	9.22
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	31,981

Item #	Strategic Planning Measure	Unit	October 2020
M-2.3b	Planned Maintenance – Preventive and Condition Based	% of Total Maintenance Hours	66%
M-2.3c	Planned Maintenance - Corrective Maintenance	% of Total Maintenance Hours	14.1%
M-2.3d	Planned Maintenance - Projects	% of Total Maintenance Hours	19.8%
M- 4.1a	Energy Use: Treatment *reported for August 2020	kWh/MG	2,362
M-4.1b	Energy Use: Pump Stations *reported for August 2020	kWh/MG	165
M-4.1c	Energy Use: Office Building *reported for August 2020	kWh/MG	65
M-5.2	Educational and Outreach Events	Number	7
M-5.3	Number of Community Partners	Number	3

Respectfully submitted,  
Steve de Mik  
 Director of Operations

TO: General Manager  
FROM: Director of Talent Management (TM)  
SUBJECT: Monthly Report for October 2020  
DATE: November 10, 2020

A. Talent Management Executive Summary

1. Recruitment Summary

New Recruitment Campaigns	7
Job Offers Accepted – Internal Selections	6
Job Offers Accepted – External Selections	9
Average Days to Fill Position	74

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

- a. Continued addressing suspect employee COVID-19 cases and potential close-contact exposures based on Virginia Department of Health (VDH) guidelines. In October, 30 employees were quarantined due to direct exposures, household exposures, or due to COVID-19 symptoms; 3 employees had confirmed positive tests; 2 employees quarantined following personal travel; 3 contractors tested positive and 1 contractor employee was quarantined due to an HRSD employee testing positive. There have been no work-related cases.
- b. Developed reporting for employee completion of online training, *COVID-19 and HRSD's Infectious Disease Preparedness and Response Plan*.
- c. Completed work with the Electrical and Energy Management Division to implement CCURE system badge readers for employee acknowledgement of COVID-19 Daily Health Assessments.
- d. With Procurement, finalized and distributed *COVID-19 Guidelines for Contractors and Visitors Entering or Working at HRSD*.
- e. HRSD's Medical Plan provider extended cost share waivers for testing and treatment of COVID-19 until mid-January.

- f. Safety staff conducted COVID-19 Health Assessment screenings and temperature checks for the Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) Loan Signing and Check Presentation Event held at the SWIFT Research Center (SWIFT RC)
3. A virtual Health Plan Fiscal Year 2020 Utilization meeting was held with HRSD's Medical Plan provider and Benefit Consultant to review claim and cost trends for medical, pharmacy and vision plans including the impact of COVID-19. There was an overall 2.1% decrease in spending, and employee health engagement remained higher than the norm.
  4. Wellness Program
    - a. On-site Flu and Tetanus clinics were held under COVID-19 safety precautions, providing 330 flu and 63 tetanus vaccines.
    - b. The Wellness Specialist worked with HR staff to modify the Wellness Plan program requirements and screening forms due to COVID 19.
    - c. Participation

<b>Year Eight Participation Activities</b>	<b>Unit</b>	<b>October 2020</b>	<b>Year to Date (March 2020–February 2021)</b>
Biometric Screenings	Number	3	73
Preventive Health Exams	Number	12	116
Preventive Health Assessments	Number	14	114
Coaching Calls	Number	0	0
Online Health Improvement Programs	Number	12	102
Web-MD Online Health Tracking	Number	44	847
Challenges	Number	0	256
Fit-Bit Promotion	Number	2	51

5. Human Resources (HR) and Organizational Development and Training (OD&T) staff continued to partner with the Organization Development consultant to conduct virtual sessions of *Interview Training for Hiring Managers* and *Courageous Conversations* and modify the Supervisor Training program.



6. The Workplace Facilitator Team conducted a virtual *Your Role in Quality* half-day session. Participants presented YRIQ projects, and “Scotch Tape vs. Fiberglass Filament Tape” by Kim Fielder, a Laboratory Specialist, was selected as the winning project.
7. A virtual *Creating Collaborative and Effective Meetings Workshop* was held. Twenty-seven participants provided overall positive feedback on the training and learning platform.
8. The Leadership Team continued to prepare for the November kick-off of the new Leadership and Management Program (LAMA).
9. OD&T and Customer Care and Billing staff worked on a customer service eLearning project.
10. Several Apprenticeship Program initiatives continued, including course development in the Canvas platform, restructuring the Electrical and Instrumentation trade, Plant Operator curriculum review, and the Student Success Program.
11. A five-year training summary is being compiled for SC&H as part of the Succession Planning Internal Audit.
12. The following Safety Notices were developed and distributed:
  - a. Uniform Sweatshirts and Electrical Safety Requirements
  - b. Dangers of Hot Work.
13. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2019</u>	<u>2020</u>
<b>Mishaps</b>	37	27
<b>Lost Time Mishaps</b>	6	1
<i>Numbers subject to change pending HR review of each case.</i>		

#### 14. Safety Division Monthly Activities

Safety Training Classes	14
Work Center Safety Inspections	12
Reported Accident Investigations	4
Construction Site Safety Evaluations	28
Contractor Safety Briefings	7
Hot Work Permits Issued	15
Confined Space Permits Issued/Reviewed	65
Occupational Health Testing	300
Industrial Hygiene Monitoring Events	3

#### B. Monthly Strategic Planning Metrics Summary

##### 1. Education and Outreach Events: 2

- a. 10/21/20 – Hampton Roads Society of Human Resources (HR-SHRM) Virtual Career Open House
- b. 10/29/20 – Virginia Employment Commission (VEC) Helping Virginia Get Back to Work Virtual Career Fair

##### 2. Community Partners: 2

- a. HR-SHRM
- b. VEC

3. Monthly Metrics

<b>Item #</b>	<b>Strategic Planning Measure</b>	<b>Unit</b>	<b>October 2020</b>
M-1.1a	Employee Turnover Rate (Total)	Percentage	1.26 %
M-1.1b	Employee Turnover - Service Retirements	Percentage	0.63%
M-1.4a	Total Training Hours Per Full Time Employee (17) – October	Total Training Hours/ FTE	4.09
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	11.06
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Community Partners	Number	2

Respectfully submitted,  
**Paula A. Hogg**  
Director of Talent Management

TO: General Manager  
FROM: Director of Water Quality (WQ)  
SUBJECT: Monthly Report for October 2020  
DATE: November 14, 2020

A. General

Pretreatment and Pollution Prevention (P3) division staff assessed no civil penalties this month.

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group reported one activity for the month of October. In collaboration with Wellness, the SEA Group introduced the Bingo Challenge, an interactive way to participate in numerous community cleanup activities and awareness events. The deadline for completing the challenge has been extended to Friday, October 30.
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 Spotsylvania County, Northumberland County, Westmoreland County and Frederick County to support monitoring required for their respective Virginia Pollution Discharge Elimination System (VPDES) permits.

D. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 1
  - P3 staff trained Tidewater Yacht Marina staff on the usage of the Boater Pump-Out carts.
2. Community Partners: 1
  - Hampton Roads Planning District Commission

### 3. Odor Complaints: 1

- October 21 - An odor complaint was received near the Plume Street pump station in Norfolk, VA. The Virginia Maritime Association (VMA) contacted South Shore Operations about excessive sewer gas odors in their building. The exhaust fan on the roof was operating, but a station crew was working on the pumps in the dry well and as a result sewage reached the dry well floor. A fan had also been setup in the dry well to keep the crew cool while working and this was apparently blowing the sewer gas into the parking lot and then into the VMA building. The meteorological conditions (heavy, damp, still morning air) did not help the situation, as the odorous air wasn't dispersing very well once it was at ground level. The crew turned off the fan in the dry well, spoke directly with staff inside VMA, completed the work and cleaned up the work area. No further complaints have been received.

### 4. IWD Related System Issues: 1

- On October 31, Boat Harbor Treatment Plant notified P3 at 08:00 of a pH reading of 9.2 SU on the raw influent. P3 staff responded to locate the source. A pH of 12.2 SU was then measured at the Marva Maid Dairy which discharges to the Boat Harbor Treatment Plant. Further investigation at Marva Maid revealed the pH probe on its neutralization tank was reading incorrectly as compared to a calibrated pH meter. The Marva Maid Dairy representative stated the pH probe would be replaced. The pH reading had returned to the normal range by 10:00.

5. Monthly Metrics

<b>Item #</b>	<b>Strategic Planning Measure</b>	<b>Unit</b>	<b>October 2020</b>
M-1.4a	Training During Work Hours Per Full Time Employee (118) (Current Month)	Total Hours / # FTE	5.14
M-1.4b	Total Training During Work Hours Per Full Time Employee (118) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	18.28
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	5:20,293
M-3.2	Odor Complaints	#	1
M-3.4	Pollutant Removal	Total Pounds Removed	60,472,186
M-3.5	Pollutant Discharge	% Pounds Discharged/ Pounds Permitted	16%
M-5.2	Educational and Outreach Events	#	1
M-5.3	Community Partners	#	1
	Average Daily Flow	Total MGD for all Treatment Plants	147.46
	Pretreatment Related System Issues	#	1

Respectfully submitted,  
*James Plett, PhD*  
 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***

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### **SWIFT Program Management Plan**

- **Tasks Completed (October 2020)**
  - Updated draft report base on Management feedback
  - Communicated updated draft report to Management for review
  
- **Upcoming Tasks (November 2020)**
  - Obtain Management actions plans
  - Finalize report

### **Fleet Services**

- **Tasks Completed (October 2020)**
  - Validated fieldwork observations
  - Conducted Exit Meeting with Management
  
- **Upcoming Tasks (November 2020)**
  - Discuss results with Director of Finance
  - Communicate draft report to Management for review

### **Succession Planning**

- **Tasks Completed (October 2020)**
  - Conducted final department level interview (IT)
  - Collected succession planning initiatives related data metrics
  - Drafted the audit report
  
- **Upcoming Tasks (November 2020)**
  - Conduct Exit Meeting with Talent Management
  - Communicate draft report to Management for review

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

- HRSD management has communicated its continued progress to develop a plan to address the recommendations included in the BC/DR report. SC&H will continue to work with HRSD process owners and management to finalize the audit report, incorporating management action plans. A specific completion date has not been identified at this time.



**Upcoming Projects (FY2021)**

A Contract Management Audit (Procurement-Non-Engineering) and the FY2022 Risk Assessment is planned to be initiated in November 2020 (Q4, CY2020).

**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	September 2020	11	2	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	August 2020	8	3	11
Engineering Procurement	4/20/18	In process	4	4	8
Corporate Governance: Ethics Function	3/21/18	August 2020**	3	2	5
Treatment Plant Operations	10/15/18	July 2021	5	4	9
Customer Care Division*	7/26/19	August 2020**	0	4	4
Safety Division*	9/12/19	September 2020	0	3	3
Permitting*	2/4/20	August 2020**	0	2	2
Payroll*	3/27/20	November 2020	0	3	3
Pollution Source Control*	6/2/20	February 2021	0	8	8
<b>Totals</b>			<b>58</b>	<b>36</b>	<b>94</b>

\*SC&H has not yet performed formal follow-up procedures for the implementation status of these MAPs. Actual status may vary within the associated process areas and will be updated upon follow-up.

\*\*SC&H is preparing follow-up procedure documentation to be sent.



**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**

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	FY-21 Sep-20	FY-21 Oct-20
	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	155.6	147.5
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	0	1
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	108%	109%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	119%	108%	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	\$33,323,871	\$32,884,361
	Aging Accounts Receivable	Percentage of receivables greater than 90 days		21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	26%	29%	
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	5:15220	5:20293
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	4	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	45,886,779	60,472,186
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	16%	16%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	9	16
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	9	12

**EFFLUENT SUMMARY FOR OCTOBER 2020**

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	10.59	59%	1	2.4	3	1	0.92	0.78	5.4	3.8	NA	NA	3
ATLANTIC	23.42	43%	9	8.8	9	2	NA	NA	NA	NA	NA	NA	15
BOAT HARBOR	15.70	63%	8	5.8	3	<1	0.57	0.48	21	18	NA	NA	12
CENT. MIDDLESEX	0.011	44%	<2	1.3	<1	<1	NA	NA	NA	NA	0.38	0.04	NA
CHES-ELIZ	17.27	72%	17	10	20	8	0.65	1.1	29	32	NA	NA	17
JAMES RIVER	14.28	71%	5	2.3	1	1	0.19	0.34	8.3	8.8	NA	NA	3
KING WILLIAM	0.069	69%	<2	<1.0	NA	1	0.032	0.036	0.62	1.2	0.27	NA	NA
NANSEMOND	16.09	54%	4	4.3	2	1	0.72	0.76	3.9	3.7	NA	NA	3
SURRY, COUNTY	0.061	94%	3	<1.0	NA	NA	NA	NA	NA	NA	NA	0.18	0
SURRY, TOWN	0.069	115%	3	17	NA	36	NA	NA	NA	NA	0.79	0.32	NA
URBANNA	0.067	67%	4	10	4	2	4.8	5.0	11	17	NA	0.11	NA
VIP	25.74	64%	3	3.2	1	1	0.94	0.66	4.7	3.6	NA	NA	0
WEST POINT	0.676	113%	16	13	2	1	1.5	2.5	10	16	NA	NA	0
WILLIAMSBURG	9.41	42%	4	3.5	11	13	0.60	0.64	1.7	2.5	NA	NA	1
YORK RIVER	14.00	93%	2	1.4	<1	<1	0.17	0.26	5.8	4.6	NA	NA	1
	<u>147.46</u>												

	% of Capacity
North Shore	65%
South Shore	56%
Small Communities	95%

	Tributary Summary					
	Annual Total Nitrogen			Annual Total Phosphorus		
	Discharged		Operational	Discharged		Operational
	YTD	Projection CY20	YTD	Projection CY20	YTD	Projection CY20
<b>Tributaries</b>	%	Lbs	%	%	Lbs	%
James River	66%	3,820,729	84%	62%	249,746	78%
York River	62%	220,776	77%	60%	15,283	79%
Rappahannock	183%	NA	NA	792%	NA	NA

Permit Exceedances: Total Possible Exceedances, FY21 to Date: 5:20,293  
Pounds of Pollutants Removed in FY21 to Date: 60,472,186  
Pollutant Lbs Discharged/Permitted Discharge FY21 to Date: 16%

	Rainfall (inch)		
	North Shore (PHF)	South Shore (ORF)	Small Communities (FYJ)
Month	6.96"	2.58"	7.09"
Normal for Month	4.36"	3.74"	4.41"
Year to Date Total	64.73"	44.30"	54.43"
Normal for YTD	45.01"	43.72"	42.68"

### AIR EMISSIONS SUMMARY FOR OCTOBER 2020

MHI PLANT	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	Temp	Venturi(s) PD	Precooler Flow	Spray Flow	Venturi Flow	Tray/PBs Flow	Scrubber	Any	THC	THC	BZ Temp
	12 hr ave (F)	12 hr ave (in. WC)	12 hr ave (GPM)	12 hr ave (GPM)	12 hr ave (GPM)	12 hr ave (GPM)	pH 3 hr ave	Bypass Stack Use	Mo. Ave (PPM)	DC (%)	Daily Ave Days >Max
ARMY BASE	0	0	0	0	0	0	0	4	34	95	0
BOAT HARBOR	0	3	0	n/a	0	0	0	2	14	100	0
CHES-ELIZ	0	0	0	0	0	0	0	0	17	100	0
VIP	0	0	0	n/a	0	0	0	0	18	99	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	1	29	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:	3