



COMMISSION MEETING MINUTES
March 24, 2020

<u>No.</u>	<u>Topic</u>	<u>Page</u>
1.	<u>Awards and Recognition</u>	3
2.	<u>Consent Agenda</u>	4
a.	<u>Approval of Minutes</u>	4
b.	<u>Contract Awards</u>	4
c.	<u>Task Orders</u>	4
d.	<u>Sole Source</u>	4
e.	<u>HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award</u>	4
f.	<u>Vacation of Easement</u>	4
3.	<u>Nansemond Treatment Plant Land Acquisition – Land Stabilization and Nansemond Treatment Plant Land Acquisition – Structure Demolition Rejection of Low Bid, Contract Award and Task Order</u>	5-8
4.	<u>West Avenue and 35th Street Interceptor Force Main Initial Appropriation and Contract Award</u>	9-10
5.	<u>Virginia Initiative Plant (VIP) Influent Motor and Temporary Construction Emergency Repairs New CIP and Initial Appropriation</u>	11-12
6.	<u>Subordinate Wastewater Revenue Bonds and Lines of Credit Resolution</u>	13
7.	<u>Unfinished Business</u>	14
8.	<u>New Business – Emergency Commission Procedures Related to COVID-19</u>	14-15
9.	<u>Commissioner Comments</u>	16
10.	<u>Public Comments Not Related to Agenda</u>	16



COMMISSION MEETING MINUTES
March 24, 2020

<u>No.</u>	<u>Topic</u>	<u>Page</u>
11.	<u>Informational Items</u>	17
a.	<u>Management Reports</u>	17
b.	<u>Strategic Planning Metrics Summary</u>	17
c.	<u>Effluent Summary</u>	17
d.	<u>Air Summary</u>	17
e.	<u>Emergency Declaration - Virginia Initiative Plant (VIP) Influent Motors Repair</u>	17
12.	<u>Fiscal Year-2021 Annual Budget</u>	18-20
13.	<u>Announcements</u>	21
Attachments (6)		



COMMISSION MEETING MINUTES
March 24, 2020

Name	Title	Present for Item Nos.
Elofson, Frederick N.	Commission Chair	1-13 (remote)
Lynch, Maurice P.	Commission Vice-Chair	1-13 (remote)
Glenn, Michael E.	Commissioner	1-13 (remote)
Lakdawala, Vishnu K.	Commissioner	3-13
Levenston, Jr., Willie	Commissioner	1-13
Rodriguez, Stephen C.	Commissioner	1-13
Taraski, Elizabeth	Commissioner	1-13
Ward, Molly Joseph	Commissioner	1-13

Commissioners Frederick Elofson, Maurice Lynch and Michael Glenn requested approval to participate in today's meeting from their homes due to the current public health crisis (COVID-19) with recommendations for social distancing and to adhere to the 10-attendee maximum requirement for a public meeting.

Roll call vote to allow remote participation: Ayes: 7 (Lakdawala absent) Nays: 0

In order to facilitate the meeting with the chair and vice-chair participating remotely, a motion was made by Commissioner Lynch to elect Commissioner Rodriguez as chair pro tem to serve during today's meeting. Commissioner Levenston seconded the motion and it carried unanimously by roll call vote.

Roll call vote: Ayes: 7 (Lakdawala absent) Nays: 0

1. **AWARDS AND RECOGNITION**

Action: No action required.

Brief: HRSD was pleased to receive the 2019 Engineering Achievement Award presented by the Engineers Club of Hampton Roads for the SWIFT Program and SWIFT Research Center. This award recognized HRSD and Hazen & Sawyer for significant and outstanding technical accomplishments.

Attachment: None

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

2. **CONSENT AGENDA**

Action: Approve the items listed in the Consent Agenda.

Moved: Willie Levenston

Seconded: Elizabeth Taraski

Roll call vote: **Ayes:** 7 (Lakdawala absent) **Nays:** 0

- a. Approval of minutes from previous meeting.
- b. Contract Awards
 - 1. [Distributed Control System \(DCS\) Graphic Standards and Alarm Management Philosophy Development](#) \$216,300
 - 2. [Electrical Control Panel Fabrication, Programming and Installation Services](#) \$4,000,000
- c. Task Orders
 - 1. [Atlantic Service Area Automated Diversion Facilities, Phase I](#) \$298,860
 - 2. [Little Creek Pump Station Modifications](#) \$268,958
 - 3. [Nansemond Treatment Plant Struvite Recovery Facility Caustic Piping Replacement](#) \$207,749
- d. Sole Source
 - 1. [Fluxus Portable Flow Meters](#)
 - 2. [SimuWorks™ Simulation Software](#)
- e. HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award
 - 1. [Elbow Road Pressure Reducing Station Godwin Pumps](#) \$1,109,000
 - 2. [Panasonic® Toughbooks](#) \$329,044
- f. Vacation of Easement
 - 1. [Sewerage System Improvements Division C, Phase II Replacement Project City of Portsmouth, Tax Parcel 00810041](#)

Item(s) Removed for Discussion: None

Attachment #1: [Consent Agenda](#)

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

3. NANSEMOND TREATMENT PLANT LAND ACQUISITION – LAND STABILIZATION AND NANSEMOND TREATMENT PLANT LAND ACQUISITION – STRUCTURE DEMOLITION REJECTION OF LOW BID, CONTRACT AWARD AND TASK ORDER (>\$200,000)

Actions:

- a. **Approve rejection of the bid submitted by Anike Group, Inc. and find the bidder non-responsive.**
- b. **Award a contract to Allan Myers Virginia, Inc. in the amount of \$3,757,777 (\$3,091,750 for NP013500 and \$666,027 for NP013600).**
- c. **Approve a task order with Kimley Horn and Associates, Inc. in the amount of \$230,631(NP013500).**

Moved: Willie Levenston
Seconded: Vishnu Lakdawala
Roll call vote:

Ayes: 8 Nays: 0

CIP Project: NP013500

Budget	\$5,734,789
Previous Expenditures and Encumbrances	(\$607,342)
Available Balance	\$5,127,447

CIP Project: NP013600

Budget	\$1,992,820
Previous Expenditures and Encumbrances	(\$219,803)
Available Balance	\$1,773,017

Contract Status	Amount
Original Contract with Kimley-Horn	\$48,787
Total Value of Previous Task Orders	\$511,749
Requested Task Order	\$230,631
Total Value of All Task Orders	\$742,380
Revised Contract Value	\$791,167
Engineering Services as a % of Construction	25%



COMMISSION MEETING MINUTES
March 24, 2020

Type of Procurement: Competitive Bid

Bidder	Bid Amount
Anike Group, Inc.	\$3,495,065
Allan Myers Virginia, Inc.	\$3,757,777
Curtis Contracting, Inc.	\$4,162,705
M. M. Gunter & Son, Inc.	\$4,308,103

Engineer Estimate: **\$4,715,000**

Contract Description: In accordance with HRSD’s competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised February 2, 2020, and four bids were received on March 3, 2020. The low bidder, Anike Group, Inc., has been determined to be non-responsive because their bid submittal did not comply with the requirements of the contract. In particular, the value submitted for the mobilization line item far exceeded six percent of the total contract value, and the contract documents indicated this value should not exceed six percent. The design engineer, Kimley-Horn, evaluated the bids and recommends award to the lowest responsive and responsible bidder, Allan Myers Virginia, Inc., in the amount \$3,757,777.

Project Description: This contract is for construction of both the Nansemond Treatment Plant Land Acquisition – Land Stabilization (NP013500) and Nansemond Treatment Plant Land Acquisition – Structure Demolition (NP013600) projects. The Land Stabilization project includes stabilization of approximately 1,000 linear feet of eroding shoreline on the northern portion of the property mentioned above, along with construction of access and maintenance roads. The project also includes stabilization of eroding channel banks, and support for the influent force main where it crosses a tributary of Skeeters Creek just south of Nansemond Treatment Plant. The Structure Demolition project consists of demolishing 16 building structures on the HRSD owned land adjacent to the Nansemond Treatment Plant.

Task Order Description and Analysis of Cost: This task order will provide construction administration services for only the NP013500 project. A fee of \$230,631 was negotiated with Kimley Horn and Associates, Inc and is comparable to other projects of similar size and complexity. Tetra Tech will provide construction administration services for efforts associated with NP013600 and construction inspection services for both NP013500 and NP013600.

<u>Schedule:</u>	PER	July 2017
	Design	April 2018
	Bid	February 2020
	Construction	April 2020
	Project Completion	May 2021



COMMISSION MEETING MINUTES
March 24, 2020

Discussion Summary: This project was originally bid in November of 2019 with bids opened on December 3, 2019. All bids were rejected at the December 17, 2019 Commission meeting due to lack of clarity in bid documents regarding mobilization.

Staff discussed typical mobilization costs and the initial effort for contractors to start a project. HRSD uses the *Hampton Roads Regional Construction Standards* developed by the Hampton Roads Planning District Commission (HRPDC) to set the maximum mobilization cost. These standards provide uniform quality of construction throughout the region by simplifying and standardizing construction practices. Most of the utilities in the Hampton Roads area use these standards, including a six percent mobilization limit, in their bid documents. Staff said Anike's bid is not considered an informality based on the definition from the Virginia Public Procurement Act "*a minor defect or variation of a bid or proposal from the exact requirements of the Invitation to Bid, or the Request for Proposal, which does not affect the price, quality, quantity or delivery schedule for the goods, services or construction being procured.*"

Public Comment: Vico Construction Corporation and Anike Group partnered together to submit the bid. Mr. Norm Slagle, Vico Vice-President, addressed the Commission on behalf of both firms. He stated Anike Group acknowledges their error by including more value in the mobilization amount than the six percent of the total bid amount specified in the Technical Specifications. However, it is their belief this error on their part in no way affects the amount of their bid or the total cost of the work to be paid by HRSD. They requested the Commission consider their error as an informality that can and should be waived. In accordance with the Advertisement for Bids for this project, the solicitation specifically states "HRSD reserves the right to reject any or all bids, waive any informality or negotiate with the low bidder." Mr. Slagle feels this section is specifically included for the bidders to first, maintain the integrity of the competitive bidding system; second, to acknowledge the fact that in the rush to provide the low bid mistakes can be made; and third, to notify all bidders that their bids will be reviewed and evaluated with fairness to all the bidders, the process, and HRSD. He further stated Section 01270, "Measurement and Payment," stipulates that, "mobilization shall not exceed six percent of the total bid amount," but does not establish the consequences if the mobilization bid amount exceeds the six percent, nor does it stipulate how the "lump sum" item will be paid. Historically, mobilization has been paid in two 50 percent draws. They propose their mobilization bid amount be paid as three percent of the total bid amount on the first draw, three percent of the bid amount on the second draw, and the remainder of the mobilization bid amount on the last and final draw, thus allowing HRSD to waive this as an informality and award the project to the low bidder. They further believe their bid should not be considered "non-responsive." Mr. Slagle said Anike Group expects to perform this contract fully in conformance with the invitation, the plans, and the contract specifications. They do not consider violating the six percent limit as a material error worthy of rejecting the bid as "non-responsive." He also indicated there are many items to be included in mobilization that are sometimes excessive. When that happens, they generally spread those costs to other line items. They overlooked the fact that their computer software did not redistribute those costs.



COMMISSION MEETING MINUTES
March 24, 2020

Responding to Commissioner's questions, staff said this is a sitework and demolition contract with nothing unusual that would require the mobilization to be higher than normal. When a bidder needs to exceed this cost, they allocate those items into other unit items or categories. Staff also explained, there are only a few occasions when a bid is acceptable with an informality, such as when an attachment is missing. A math error is not considered an informality. They cannot allow a bidder to change the cost to a different value or spread the cost after the bid has been submitted. The option proposed by Mr. Slagle to spread the costs is not in alignment with other bids.

Responding to Commissioner's questions, Mr. Slagle said he was aware of the six percent limit on mobilization and they simply made a mistake in keying the information from their paper document into HRSD's electronic form.

Mr. Henifin thanked Mr. Slagle for addressing the Commission.

Attachment: None

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

4. WEST AVENUE AND 35TH STREET INTERCEPTOR FORCE MAIN
INITIAL APPROPRIATION AND CONTRACT AWARD

Actions:

- a. Appropriate total project funding in the amount of \$4,404,011.
- b. Award a contract to Kimley-Horn and Associates, Inc. (Kimley-Horn).

Moved: Frederick Elofson

Seconded: Willie Levenston

Roll call vote: Ayes: 8 Nays: 0

CIP Project: BH014000

Type of Procurement: Competitive Negotiation

Proposers	Technical Points	Recommended Selection Ranking
Kimley-Horn and Associates, Inc.	80	1
O'Brien & Gere Engineers, Inc.	78	2
Michael Baker, Inc.	73	3

Contract Description: A Public Notice was issued on December 8, 2019. Seven firms submitted proposals on January 15, 2020 and all firms were determined to be responsive and deemed fully qualified, responsible and suitable to the requirements in the Request for Proposals. Three firms were short listed, interviewed and technically ranked. The Professional Services Selection Committee selected the firm of Kimley-Horn and Associates, Inc. (KHA) whose professional qualifications and proposed services best serve the interest of HRSD.

Project Description: This project will replace approximately 3,750 linear feet of cast iron force main, primarily along West Avenue and 35th Street in the City of Newport News. The existing pipeline to be replaced includes 2,500 feet of 12-inch pipe, 250 feet of 18-inch pipe and 1,000 feet of 20-inch pipe. The work is a part of the Consent Decree Rehabilitation Plan Phase II.



COMMISSION MEETING MINUTES
March 24, 2020

Funding description and Analysis of Cost: The total cost estimate for this project is \$4,404,011. The estimate includes approximately \$386,308 in engineering costs, \$3,214,162 in construction costs, and an 18 percent project contingency of \$803,541. The estimate was developed by HRSD Operations and reviewed by HRSD Design and Construction. A fee of \$98,100 was negotiated for the preparation of a Preliminary Engineering Report.

<u>Schedule:</u>	Pre-Planning	January 2020
	PER	April 2020
	Design	November 2020
	Bid	October 2021
	Construction	February 2022
	Project Completion	June 2023

Attachment: None

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

**5. VIRGINIA INITIATIVE PLANT (VIP) INFLUENT MOTOR AND TEMPORARY CONSTRUCTION EMERGENCY REPAIRS
NEW CIP AND INITIAL APPROPRIATION**

Actions:

- a. **Approve a new Capital Improvement Project (CIP) for the Influent Motor and Temporary Construction Emergency Repairs**
- b. **Appropriate total project funding in the amount of \$1,100,000**

Moved: Vishnu Lakdawala

Seconded: Willie Levenston

Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: VP018700

Project Description: On February 1 one of four raw water influent (RWI) pump motors failed at VIP. On February 7 a second one failed. These pumps are some of HRSD's most critical infrastructure. Flow into VIP must be pumped into the treatment plant from the gravity main and without the influent pumps raw sewage would back up into the neighborhood surrounding VIP. Operating on two out of four pumps limits VIP's RWI pumping capacity below flows that occur during high rain events or high tides.

Both motors appeared to fail under similar operating conditions. A detailed forensic analysis to investigate the root cause of the failures is currently being conducted.

Staff treated the repair efforts as an emergency and considered the risk of depending on two pumps as unacceptable. Efforts to correct the problem required staff to utilize the services of the contractor Bridgeman Civil, Inc., to install a temporary pumping system that provided 30 million gallons per day (MGD) in RWI pumping capacity. The temporary pumping system is installed and functional. We also utilized engineering services and a contractor to repair the motors.

Both motors have been repaired and returned to VIP.

Funding Description: The total cost for this project is estimated at \$1.1 million based on contractor estimates. The estimates have been reviewed by staff and are considered reasonable. The proposed Commission action creates and fully funds a new CIP project that will allow future costs as well as all costs already incurred against the Operations Department Budget for this emergency to be charged to this CIP project.



COMMISSION MEETING MINUTES
March 24, 2020

Discussion Summary: The temporary pump and piping system is blocking the roadway and cannot be left in place permanently. The piping will be dismantled and stored for future use (hopefully never needed). During normal operations, one pump can handle the majority of flow into the plant. As flows increase diurnally, a second pump is often needed and during wet weather three pumps are occasionally required to handle wet weather peaks. The fourth pump is designed as a spare should one of the other three fail or be taken out of service for maintenance.

Attachment #2: [Photos](#)

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

6. **SUBORDINATE WASTEWATER REVENUE BONDS AND LINES OF CREDIT RESOLUTION**

Action: Adopt a resolution authorizing the issuance and award of one or more series of Hampton Roads Sanitation District subordinate wastewater revenue bonds and authorizing entering into one or more lines of credit 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: Frederick Elofson

Seconded: Elizabeth Taraski

Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: Given the unprecedented impact the COVID-19 virus has had on the municipal markets, staff is requesting Commission authorization to act in the best interest of ratepayers to ensure HRSD can navigate through these volatile, fast-moving financial market conditions.

One of the key financing tools will be the Line of Credit and this resolution authorizes up to \$285 million. If the \$50 million of variable rate debt has a failed weekly remarketing, HRSD would have the option of using the Line of Credit or cash to pay-off the bonds. Also, HRSD is counting on the Virginia Resources Authority to issue new bonds to fund the \$125 million Virginia Clean Water Revolving Loan Fund (VCWRLF). If the municipal market is closed (meaning there are no buyers), HRSD could use its Line of Credit to fund the capital program for Fiscal Year 2021. As a secondary tool, HRSD would like the ability to issue new debt via negotiated or competitive sale up to \$235,000,000, which is the projected Fiscal Year 2021 capital spend.

In addition, if the market opportunity exists, the [resolution](#) allows for a refunding up to the maximum principal amount to be used to pay principal, premium and interest on refunding candidates, plus costs of issuance on the refunding bonds as long as it meets our Financial Policy threshold of three percent savings net present value.

These documents have been prepared and reviewed by bond counsel and HRSD's financial advisor.

Discussion Summary: There is an existing line of credit in place with a low balance to keep it open. This resolution would allow staff to increase the line of credit to an amount not to exceed the Fiscal Year 2021 capital spend plus \$50 million should it be needed to take out the variable rate debt. The resolution also allows a new money debt issue and/or a refunding if needed.

Attachment #3: [Resolution](#)

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

- 7. **UNFINISHED BUSINESS – None**
- 8. **NEW BUSINESS – EMERGENCY COMMISSION PROCEDURES RELATED TO COVID-19**

Action: Adopt resolution authorizing the General Manager to act on behalf of the Commission for all items requiring Commission approval in accordance with the HRSD Governance Guidelines through July 29, 2020.

Moved: Frederick Elofson
Seconded: Willie Levenston
Roll call vote:

Ayes: 8 **Nays:** 0

Brief: Governor Northam issued Executive Order Number Fifty-One (2020) on March 12, 2020 declaring a state of emergency in the Commonwealth due to the novel Coronavirus (COVID-19). The Department of Homeland Security, Cybersecurity and Infrastructure Security Agency (CISA) has classified wastewater treatment as a critical infrastructure industry with a special responsibility to maintain operations during the COVID-19 response.

The Attorney General, Mark A. Herring rendered an official advisory opinion regarding holding meetings solely by electronic communications on March 20, 2020 in which his opinion limited electronic meetings to only “decisions that must be made immediately and where failure to do so could result in irrevocable public harm.

HRSD’s Enabling Act grants broad powers to the HRSD Commission for the benefit of the inhabitants of the Commonwealth and for the promotion of their safety, health, welfare, convenience and prosperity, performing an essential governmental function. Certain actions must be taken by the Commission on a regular basis to maintain operations ensuring protection of public health and the environment and failure of the Commission to meet and act due to COVID-19 related issues could threaten continued HRSD operations.

Actions required to minimize spread of COVID-19 require implementing social distancing concepts at meetings of the HRSD Commission, including limiting total number of people assembled, maintaining adequate personal space between all participants, limiting total meeting time and other actions that may be implemented as the response to COVID-19 evolves.

The attached [resolution](#) authorizes the General Manager (or his designee) to act on behalf of the Commission for all items requiring Commission approval in accordance with the HRSD [Governance Guidelines](#) with the following exceptions:

SECTION 3. COMMISSION ACTIONS, A. Commission Approval Items:

- 1. Policies
- 2. Annual Operating Budget



COMMISSION MEETING MINUTES
March 24, 2020

3. Capital Improvement Program
5. Schedule of rates including facility charges
8. i. Real Property
 - (1) Acquisition by condemnation
10. Personnel
 - a. Compensation of General Manager
11. Regulations

This authorization shall remain in effect through July 28, 2020 unless sooner amended or rescinded by further Commission action. This resolution also amends the Commission Governance Guidelines to remove any limitations on the use of a consent agenda to receive Commission approval during the regularly scheduled April, May and June 2020 to facilitate expedited meetings during the COVID-19 response should the meetings be held. Further, the General Manager, in consultation with the Commission Chair may elect to cancel the regularly scheduled April, May and June 2020 meetings due to COVID-19 related issues without further Commission action.

Discussion Summary: Ms. Hansen, in consultation with the General Manager, said they reviewed the Attorney General's opinion, the Enabling Act, and the Commission Governance Guidelines to develop the best solution to comply with all guidance, while continuing operations. She will continue to pursue clarification from the Attorney General's office and seek ways to conduct an electronic meeting. There is no prior precedent for this situation. Other local governments are conducting business in a similar manner, limiting in person attendance.

Commissioner Elofson believes this resolution is necessary to keep functioning and making critical decisions under any issues we are facing.

Mr. Henifin said we will continue to pursue electronic meeting options to conduct business. In the event we cannot meet, we will pursue electronic informational meetings, if necessary. At this time we will continue to operate under the current Governance Guidelines (as amended to expand items approved via a consent agenda) with monthly meetings conducted in accordance with the HRSD Remote Participation Policy and current COVID-19 guidance, recommendations and directives from the Governor, VDH and CDC. Should a future meeting be cancelled per the resolution, General Manager approvals will only be made after full review of a complete agenda package and only on the regularly scheduled date(s) of a Commission meeting.

Mr. Henifin stated he has requested relief from the EPA on the consent decree deadlines. He also feels it is important to continue to award contracts and purchase materials to help keep people employed and boost the economy.

Attachment #4: [Resolution and Guidelines](#)
Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

9. **COMMISSIONER COMMENTS**

Commissioner Ward thanked Ms. Hansen, Mr. Henifin and staff on the amazing job accomplished, in very little time, to develop a workable solution to make everyone feel safe while meeting HRSD's needs and continuing to perform the valuable service to the community.

Commissioner Taraski recognized and thanked Ms. Jamie Mitchell for her March 10 presentation on the SWIFT program and its benefits for the Bay and resiliency. The presentation was held at the Suffolk Public Library's lecture series on the Chesapeake Bay, environmental awareness and resiliency.

Commissioner Rodriguez mentioned the recent news article on what not to flush. He thought the article was timely and well done. He thanked staff for taking the time to inform the public on a very important topic.

10. **PUBLIC COMMENTS NOT RELATED TO AGENDA – None**



COMMISSION MEETING MINUTES
March 24, 2020

11. **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](#)
- e. [Emergency Declaration - Virginia Initiative Plant \(VIP\) Influent Motors Repair](#)

Discussion Summary: Mr. Henifin explained the two legislative initiatives that have moved through the General Assembly, with one signed by the Governor (SB 685) and the other pending approval by April 11, 2020. These two bills will result in direct savings to HRSD.

SB 685: Tax exemption for certified pollution control equipment and facilities; timing of certification by the state certifying authority. Provides that, upon the request of a political subdivision, the state certifying authority having jurisdiction shall certify the tax-exempt status of certain pollution control equipment and facilities on a prospective basis. The property eligible for such treatment shall be equipment and facilities intended for use by a political subdivision in conjunction with the operation of its water, wastewater, stormwater, or solid waste management facilities or systems. Signed by the Governor on March 2, 2020.

HB 1609: Nutrient and sediment credit generation and transfer; limit certain transfers to private sector. Limits certain transfers of nonpoint nutrient credits to those credits generated by the private sector. The bill provides that while any locality may, without the involvement of a third party, generate its own nutrient or sediment credits and request that such credits be certified by the Department of Environmental Quality, such certifications shall only be used for the purpose of determining whether the project complies with certain credit generation requirements. The bill authorizes any publicly owned water treatment works that is constructing or expanding a treatment facility to permanently retire a portion of its wasteload allocation under certain circumstances. The following language was added to the bill to ensure we would have the ability to use our credits for all SWIFT construction: *Except for a water reclamation and reuse project at a treatment works, no more than 10 pounds per year of phosphorous allocation may be applied toward a single project's postconstruction phosphorus control requirement.*

Attachment #5: [Informational Items](#)

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

12. **FISCAL YEAR-2021 ANNUAL BUDGET**

Actions:

- a. Approve the [FY-2021 to FY-2040 Financial Forecast](#)
- b. Approve the [Operating Budget for FY-2021](#), which includes the Operating, Debt Service and Transfer Appropriations, and authorize distribution of the Budget in accordance with the Trust Agreement.
- c. Approve the [Capital Budget](#) for FY-2021
- d. Approve the Capital Improvement Program for FY-2021 to FY-2030 ([Summary Capital Improvement Program](#))
- e. Approve the [Rate Schedule](#) to be effective July 1, 2020 subject to the requirements of the Enabling Act.

Moved: Willie Levenston
Seconded: Elizabeth Taraski
Roll call vote:

Ayes: 8 **Nays:** 0

Brief: The annual budgeting process includes updating the 20-year Financial Forecast and preparing the Operating Budget (which includes the operating, debt service and transfer appropriations), the Capital Budget and the Capital Improvement Program (CIP) as well as the corresponding Rate Schedule to support these budgets. The Commission is required to approve an annual budget in sufficient time to ensure the proposed rates, fees and charges are published in a newspaper of general circulation within the District for four consecutive weeks.

One budget workshop to review components of the budget was held after the regular Commission meeting on February 25. The Finance Committee (comprised of Commissioners Rodriguez and Lynch) and several other commissioners participated in the March 2 CIP review meeting. In light of the evolving response to COVID-19, the staff will present the budget information to the Commission for action at the March 24th meeting.

The Operating Budget is not the driver in HRSD's Financial Forecast. The required capital investments to support the regulatory mandates and the related debt service coverage and cash reserves drive our revenue requirements. The Operating Budget proposed for FY-2021 includes several programmatic increases required to support existing and expanding operational requirements. This level of investment for operations will ensure we are well positioned to pump local dollars back into the local economy once the COVID-19 response is complete.



COMMISSION MEETING MINUTES
March 24, 2020

The Capital Budget is \$235 million and represents the first year of the \$2.92 billion ten-year CIP. Projects in the CIP are individually presented to the Commission for full project funding authorization specific to each project at the time the first dollar is spent. Changes to the CIP, which may be required by changing conditions, are presented to the Commission as amendments. The CIP will be available on the HRSD website upon Commission approval.

The Financial Forecast model was updated to project major expense drivers, such as construction costs, inflation, operating cost increases, and borrowing costs and the revenue requirements needed to ensure financial sustainability.

The Rate Schedule contains the rates necessary to generate sufficient revenue to cover expenses and reserve requirements for the next fiscal year. HRSD's Rate Model (the Model) uses a cost accounting process to allocate all operating costs to volume and each of four specific pollutants: Biochemical Oxygen Demand (BOD), total suspended solids, phosphorus and nitrogen. The Model designates each line item cost as fixed or variable and uses engineering criteria to allocate the variable costs to each of the four pollutants. Once the operating costs have been allocated, the Model derives rates for volume (\$/CCF) and high strength surcharges (\$/pound); the latter equate to HRSD's marginal or incremental cost attributable to treating each pollutant in excess of the amount present in typical domestic wastewater. The result is that the Model calculates rates sufficient to recover expenses.

To meet the requirements of the Financial Forecast, the FY-2021 wastewater charge was planned to increase from \$5.86 per 100 cubic feet to \$6.39 per 100 cubic feet. The current average residential customer (as measured by a 5/8-inch meter) uses approximately 5.6 CCF of water per month, and that planned increase would result in an average monthly increase of \$2.96 (approximately \$0.10 per day).

In light of the COVID-19 health and economic crisis, staff cannot recommend the Commission stay the course and maintain our financial plan. The Commission has been steadfast in following the financial plan developed in response to the Federal Consent Decree and Chesapeake Bay TMDL. Maintaining the plan has built confidence in HRSD from the financial markets as well as resulted in recent rating upgrades. As a result of executing that plan over the past 12 years, HRSD is in a very strong position to whether short term economic disasters, like the one we are facing with COVID-19. Staff is recommending the HRSD wastewater rates remain unchanged from 2020 with a few exceptions outlined below. Skipping the planned rate increase in Fiscal Year 2021 will result in the loss of nearly \$1 billion in revenue over the 20-year financial forecast. Staff has modified the financial plan to accommodate this loss of revenue with several adjustments which will be covered during the March 24 meeting. Consultation with Bond Counsel and our Financial Advisor indicates we should be to minimize impact of this deviation from plan with strong and clear communication with investors and the rating agencies.



COMMISSION MEETING MINUTES
March 24, 2020

The only adjustments proposed to the rate schedule are focused on positive changes to some small community rates. The first is standardizing our minimum charge across all ratepayers. This will be a positive for many low consumption users in the small communities which currently have high minimum charges.

Rates to provide wastewater services to the Middle Peninsula communities include both the cost of the treatment and the collection systems. Middle Peninsula residents pay the HRSD regional treatment rate, the weighted average sewer collection system rate for the metro area, plus the capital costs (Capital Recovery Rate) of the collection systems, if required. The capital cost component generally includes the amortized cost incurred by HRSD when the systems were acquired.

The other adjustments are due to the retirement of some capital recover charges (referenced above) in Urbanna and West Point. These charges were added when HRSD assumed operation to recover sewer system debt that existed at that time as well as some capital improvements HRSD made to those systems at that time. All other rates and charges remain at the FY-2020 level.

Attachment #6: [Presentation and Budget Documents](#)

Public Comment: None



COMMISSION MEETING MINUTES
March 24, 2020

13. **ANNOUNCEMENTS**

No further action is required for the Capital Improvement Program or the FY-2021 budget. Therefore, the March 31 and April 16 Finance Committee meetings are cancelled.

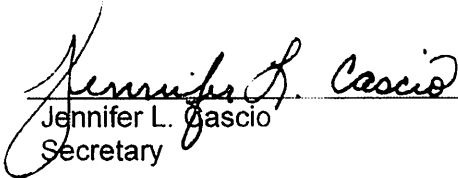
If we are still under the COVID-19 conditions and restrictions in April and need to hold a Commission meeting, all items requiring a full agenda item and Commission Action will be included in the Consent Agenda. We would try to keep the meeting time to 15 minutes including public comments, with no more than five commissioners assembled in place.

Next Commission Meeting Date: April 28, 2020 at the HRSD North Shore Operations Center, 2389 G. Avenue, Newport News, VA 23602

Meeting Adjourned: 10:56 a.m.

SUBMITTED:

APPROVED:


Jennifer L. Cascio
Secretary


Frederick N. Elofson
Commission Chair

HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #1

AGENDA ITEM 2. CONSENT AGENDA

b. Contract Awards

- | | | |
|----|---|-------------|
| 1. | <u>Distributed Control System (DCS) Graphic Standards and Alarm Management Philosophy Development</u> | \$216,300 |
| 2. | <u>Electrical Control Panel Fabrication, Programming and Installation Services</u> | \$4,000,000 |

c. Task Orders

- | | | |
|----|--|-----------|
| 1. | <u>Atlantic Service Area Automated Diversion Facilities, Phase I</u> | \$298,860 |
| 2. | <u>Little Creek Pump Station Modifications</u> | \$268,958 |
| 3. | <u>Nansemond Treatment Plant Struvite Recovery Facility Caustic Piping Replacement</u> | \$207,749 |

d. Sole Source

1. [Fluxus Portable Flow Meters](#)
2. [SimuWorks™ Simulation Software](#)

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

- | | | |
|----|--|-------------|
| 1. | <u>Elbow Road Pressure Reducing Station Godwin Pumps</u> | \$1,109,000 |
| 2. | <u>Panasonic® Toughbooks</u> | \$329,044 |

f. Vacation of Easement

1. [Sewerage System Improvements Division C, Phase II Replacement Project City of Portsmouth, Tax Parcel 00810041](#)

CONSENT AGENDA ITEM 2.b.1. – March 24, 2020

Subject: Distributed Control System (DCS) Graphic Standards and Alarm Management Philosophy Development
Contract Award (>\$200,000)

Recommended Action: Award a contract to Emerson Process Management Power and Water Solutions, Inc. in the amount of \$216,300.

Type of Procurement: Sole Source

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

HRSD Estimate: \$216,300

Contract Description: This contract is an agreement for the development of standards and best practices, in collaboration with HRSD personnel, for a high-performance DCS operator interface and Alarm Management Philosophy for use at all of the major treatment plants.

Project Description: This project will provide the criteria for the development of new robust operator graphical interface systems that will improve operator recognition and understanding of abnormal conditions while mitigating risk and reducing response time. The new interface should reduce operator stress and fatigue by using industry best practices for performance-based graphical displays and alarm management principles to support operator awareness and improved plant operations. This project will over time help facilitate the standardization of operator screens across HRSD's major treatment plants. The standards created will be used first for the upcoming James River Treatment Plant improvements and SWIFT full-scale construction. To meet that deadline the project must be completed by October 2020.

Analysis of Cost: All discounted costs are in accordance with the Emerson-HRSD Preferred Customer Agreement. Price includes estimated travel and living expenses for 10 days of onsite workshops by Emerson Engineers.

CONSENT AGENDA ITEM 2.b.2. – March 24, 2020

Subject: Electrical Control Panel Fabrication, Programming and Installation Services Contract Award (>\$200,000)

Recommended Action: Award a Contract Agreement for Electrical Control Panel Fabrication, Programming and Installation Services to CEC Controls Company Inc. (CEC) and Systems East, Inc. (SEI) in the combined estimated amount of \$800,000 for year one with four annual renewal options and a combined estimated cumulative value in the amount of \$4,000,000.

Type of Procurement: Competitive Negotiation

Proposers	Technical Points	Recommended Selection Ranking
CEC Controls	93	1
Systems East, Inc.	91	2

HRSD Estimate:

\$1,500,000/year

Contract Description: This contract is an agreement for various electrical control panel services to include control panel fabrication, programming and installation throughout HRSD work centers and pump stations on an as needed basis. The control panels automate flow, automate valves, monitor pipe pressure, flow temperature and several other process functions while categorizing data for analysis by HRSD personnel. Initial work under this contract will include fabrication of HRSD Supervisory Control And Data Acquisition control panels.

A Public Notice was issued on December 15, 2019. Two Offerors submitted proposals on January 22, 2020 and both firms were determined to be responsive and deemed fully qualified, responsible and suitable to the requirements in the Request for Proposal (RFP). The scores from both Offeror's were evaluated to be very competitive, with each having almost equal amounts of experience and personnel with proposals demonstrating exceptional understanding of the range of services required for this contract. Due to anticipated increase in the need for these services throughout HRSD, it is the intent to award two separate agreements which will include build out and implementation of current control panel parts inventory.

Analysis of Cost: This is an estimated use contract and the HRSD estimate is based on anticipated work to be performed during first contract year. Costs were determined to be fair and reasonable based on previous projects of similar scope and comparative cost analysis based on sample job order scenarios and price sheets published in the RFP.

CONSENT AGENDA ITEM 2.c.1. – March 24, 2020

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

Recommended Action: Approve a task order with Emnet, LLC in the amount of \$298,860.

CIP Project: CE011850

Budget	\$3,250,000
Previous Expenditures and Encumbrances	(\$358,560)
Available Balance	\$2,891,440

Contract Status:	Amount
Original Contract with Emnet, LLC	\$0
Total Value of Previous Task Orders	\$254,400
Requested Task Order	\$298,860
Total Value of All Task Orders	\$553,260
Revised Contract Value	\$553,260

Project Description: The project will involve installing a new control valve at Lynn Shores Drive and adding automated 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. The project also reduces risk by providing a reliable means of isolation in the event of an emergency.

Task Order Description: HRSD has contracted with Emnet to provide professional services for real-time decision support systems (RT-DSS). The effort is commonly referred to as 'smart sewer' and evaluates the benefits of real time control within the collection system to help meet various goals over different time horizons. A recent task order examined the operation of HRSD's Chesapeake-Elizabeth and Atlantic service areas and determined that using an automated diversion strategy could maximize wet weather capacity of the existing collection system and indefinitely delay the need for additional wet weather capacity infrastructure. The Oceana Offline Storage Facility project (CE011840) has since been delayed.

This task order will provide professional services for the RT-DSS strategy associated with this CIP project and provide important information for the Salem Road

Interconnect Force Main (CE011825). Delay of the Oceana Offline Storage Facility was predicated on the implementation of this strategy.

Analysis of Cost: The cost for this task order is based on contracted labor rates and will be billed on a time and materials basis. Engineering Department staff and Emnet discussed the estimated number of hours in-depth as HRSD has not previously engaged this type of service.

<u>Schedule:</u>	Design	February 2020
	Construction	December 2020
	Project Completion	August 2021

CONSENT AGENDA ITEM 2.c.2. – March 24, 2020

Subject: Little Creek Pump Station Modifications
Task Order (>\$200,000)

Recommended Action: Approve a task order with REW Corporation in the amount of \$268,958.

CIP Project: CE011830

Budget	\$849,000
Previous Expenditures and Encumbrances	(\$150,690)
Available Balance	\$698,310

Contract Status:	Amount
Original Contract with REW Corporation	\$400,000
Total Value of Previous Task Orders	\$135,435
Requested Task Order	\$268,958
Total Value of All Task Orders	\$404,393
Revised Contract Value	\$804,393

Project Description: There are five terminal sewer pumping stations serving the Little Creek Amphibious Base. HRSD will be responsible for upgrading one station to meet future system pressures associated with the closure of the Chesapeake-Elizabeth Treatment Plant. Two other stations are being upgraded by the Navy to meet the future system pressures, and the remaining two stations were determined to be adequate for the future hydraulic conditions.

Task Order Description: This task order will provide construction services for the required upgrade associated with this CIP.

Analysis of Cost: The cost for this task order is based on previously negotiated annual services contract rates for labor plus the cost of materials to complete the work. The cost negotiated with REW is below the Engineer's estimate for this work.

Schedule: Construction April 2020
Project Completion December 2020

CONSENT AGENDA ITEM 2.c.3. – March 24, 2020

Subject: Nansemond Treatment Plant Struvite Recovery Facility Caustic Piping Replacement
Task Order (>\$200,000)

Recommended Action: Approve a task order with Tidewater Utility Construction Inc. in the amount of \$207,749.

Contract Status:	Amount
Original Contract with Tidewater Utility Construction Inc.	\$0
Total Value of Previous Task Orders	\$11,477
Requested Task Order	\$207,749
Total Value of All Task Orders	\$219,226
Revised Contract Value	\$219,226

Task Order Description: This task order will provide caustic line repair services at the Nansemond Treatment Plant Struvite Recovery Facility (SRF). Approximately 1,000 LF of piping will be replaced in both the SRF and dewatering buildings and between the two buildings.

Analysis of Cost: The cost for this task order is based on the Sewer Repair and Condition Assessment annual contract pricing. Additional items were reviewed by the engineering consultant and considered to be fair and reasonable based on similar projects and market analysis.

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

Subject: Fluxus Portable Flow Meters
Sole Source (>\$10,000)

Recommended Action: Approve the use of Fluxus Portable Flow Meters by Flexim Americas Corporation at all HRSD facilities.

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 Fluxus Portable Flow Meters. These are ultrasonic strap-on meters that work on concrete pipes requiring no physical penetration. The portable meter is used by Electrical and Instrumentation (E&I), Treatment and Interceptors to measure, monitor and control flow as well as to collect flow data.

The intent of this sole source is to prepare for discontinuation of the comparable ISCO brand flow meters (previously approved sole source) and standardize on a new product throughout HRSD. The E&I Department tested two competitive models that included Badger Dynasonics & Greyline brand meters. Both models were unable to meet the requirements for accurately measuring flow through concrete pipe.

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

Subject: SimuWorks™ Simulation Software
Sole Source (>\$10,000)

Recommended Action: Approve the use of SimuWorks™ software by Hydromantis Environmental Software Solutions Inc. for use at 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 SimuWorks™ simulation software for advanced training and plant analysis. This software has a unique interface into an educational learning environment with specific views and functionality for wastewater operators and administrators. The software provides an intuitive, hands-on experience for trainees to operate a full-scale treatment plant under a wide range of loadings, environmental conditions, and operating strategies.

HRSD will use this wastewater process simulator mainly as part of the interactive training environment for the Apprenticeship Program but will extend its use out to Operations.

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

Subject: Elbow Road Pressure Reducing Station
 Godwin Pumps
 HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award (>\$200,000)

Recommended Actions:

- a. Approve the use of the HGACBuy Contract #CM02-19 for four Godwin brand pumps from Xylem Dewatering Solutions, Inc.
- b. Award a contract to Xylem Dewatering Solutions, Inc. in the amount of \$1,109,000.

HRSD Estimate: \$1,109,000

CIP Project: CE011821

Budget	\$8,984,000
Previous Expenditures and Encumbrances	(\$6,832,195)
Available Balance	\$2,151,805

Project Description: This project will construct a Pressure Reducing Station (PRS) on Section A of the Elbow Road Interceptor Force Main (IFM) on Elbow Road in Chesapeake. HRSD purchased the land necessary to construct the proposed PRS in March 2019. The project is needed to provide reliable capacity and maintain HRSD pressure policy requirements when flow is diverted in support of the Chesapeake-Elizabeth Treatment Plant closure and for the Regional Wet Weather Management Plan (RWWMP). This project must be substantially complete by June 2021.

Contract Description: This purchase is for four permanently installed Godwin pumps to be used for the construction of the Elbow Road Pressure Reducing Station on Section A of the Elbow Road Interceptor Force Main. The pumps will also include diesel engines, skid bases and other accessories. This purchase will aid in providing reliable capacity and maintain HRSD pressure policy when flow is diverted in support of the Chesapeake Elizabeth Treatment Plant closure and for the ultimate Regional Wet Weather Management Plan.

Analysis of Cost: HGACBuy competitively solicited this cooperative contract solution. HRSD is eligible to use this competitively bid contract and there is a significant cost savings to HRSD using this contract.

CONSENT AGENDA ITEM 2.e.2. – March 24, 2020

Subject: Panasonic® Toughbooks
Use of Existing Competitively Awarded Contract Vehicle and Contract
Award (>\$200,000)

Recommended Actions:

- a. Approve the use of the Fairfax County IT Hardware and Software contract for purchase of Panasonic® Toughbooks from CDW-G.
- b. Award a contract to CDW-G in the amount of \$329,044.

Contract Description: This contract is for the purchase of the Panasonic® Toughbook 55 as part of a division-wide upgrade for the Electrical and Instrumentation personnel. The hardware will include Windows 10 Professional, all associated accessories and a three-year warranty.

Fairfax County competitively solicited this cooperative contract solution. HRSD is eligible to use this competitively bid contract.

Analysis of Cost: By utilizing the cooperative contract through Fairfax County, HRSD is receiving over 13 percent cost savings.

CONSENT AGENDA ITEM 2.f.1. – March 24, 2020

Subject: Sewerage System Improvements Division C, Phase II Replacement Project
City of Portsmouth, Tax Parcel 00810041
Vacation of Easement

Recommended Action: Authorize vacation of two existing easements in the City of Portsmouth and authorize the General Manager to execute deed, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary.

CIP Project: VP011600

Project Description: As part of the closeout of the recently completed Sewerage System Improvements Division C, Phase II Replacement Project, HRSD agreed to vacate the existing two easements no longer required. The two easements are within Tax Parcel 00810041 and recorded as 30-foot Private HRSD Easement (Inst. #110009305) and Variable Width HRSD Utility Easement (Inst. #140006629). The underlying fee interest is owned by the City of Portsmouth.

With the abandonment of the old pipeline and the installation of the new pipeline within the Elm Avenue right of way, HRSD staff has determined these easements are no longer needed.

Funding Description: No funding required.

Agreement Description: The attached [Deed of Vacation of Easement](#) has been reviewed by HRSD legal counsel.

This Instrument prepared by
Kellam, Pickrell, Cox & Anderson, P.C.

Prepared Without Benefit of Title Examination

Tax Exempt—Sections 58.1-811(A)(3)
and (C)(4) Code of Virginia

DEED OF VACATION OF EASEMENT

THIS DEED OF VACATION OF EASEMENT (the "*Deed*") made this 31st day of March, 2020, by and between the **HAMPTON ROADS SANITATION DISTRICT**, a political subdivision of the Commonwealth of Virginia ("*HRSD*") (a Grantor for indexing purposes), and the **CITY OF PORTSMOUTH, VIRGINIA**, a municipal corporation of the Commonwealth of Virginia (the "*City*") (a Grantee for indexing purposes).

WITNESSETH:

WHEREAS, the City is the owner of certain real property located at the northwest corner of Elm Avenue and South Street known as "Parcel 1-A-1" (collectively, the "*Property*"); and

WHEREAS, a portion of the Property is shown on the plat entitled "Exhibit Showing 30' Private HRSD Easement (Instr. #110009305) and Variable Width HRSD Utility Easement (Instr. #140006629) Hereby Vacated Property of City of Portsmouth, Portsmouth, Virginia" dated December 5, 2019, prepared by Johnson, Mirmiran & Thompson, Engineers (the "*Plat*") and attached hereto as Exhibit A; and

WHEREAS, it is the desire and intent of HRSD to vacate such easements encumbering the Property in the location as shown on the Plat and as hereinafter provided; and

PARCEL NO.: 0081-0040
CONSIDERATION: \$0.00

WHEREAS, the City and HRSD acknowledge that such vacation is subject to all existing pipes and/or sewage lines existing within said location, which HRSD has no duty or obligation to excavate or remove. The City and HRSD further acknowledge that such pipes and/or sewage lines have been taken out of service and have been flowable filled.

VACATION OF EASEMENT

NOW THEREFORE, in consideration of the premises and the sum of One Dollar (\$1.00), cash in hand paid, the receipt and sufficiency of which are hereby acknowledged, HRSD does hereby VACATE, QUITCLAIM AND RELEASE the following property, to-wit:

VACATION ONE:

ALL that certain piece or parcel of land, situate in the City of Portsmouth, Virginia, as shown on an exhibit entitled: "Exhibit "A" Showing 30' Private HRSD Easement on Parcel 1-A Property of City of Portsmouth, Portsmouth, Virginia" dated July 1, 2011, prepared by Horton & Dodd, P.C., Surveyors, Engineers & Planners, which is recorded in the aforesaid Clerk's Office as Instrument No. 110009305 and as more particularly shown as "30' Private HRSD Easement (Inst. #110009305) Hereby Vacated" on plat entitled "Exhibit Showing 30' Private HRSD Easement (Instr. #110009305) and Variable Width HRSD Utility Easement (Instr. #140006629) Hereby Vacated Property of City of Portsmouth, Portsmouth, Virginia" dated December 5, 2019, prepared by Johnson, Mirmiran & Thompson, Engineers, which is attached hereto as Exhibit A.

VACATION TWO:

ALL that certain variable width utility easement lying, situate and being in the City of Portsmouth, Virginia, designated and described as: "Variable Width Utility Easement to be Conveyed to HRSD", as shown on a certain plat entitled "Exhibit Showing Variable Utility Easement and Variable Width Temporary Construction Easement to be Conveyed from City of Portsmouth to Hampton Roads Sanitation District Portsmouth, Virginia" dated February 14, 2014, made by Rouse-Sirine Associates, Ltd. which is recorded as Instrument No. 140006629 and as identified as "Variable Width HRSD Utility Easement (Inst. #140006629) Hereby Vacated" on plat entitled "Exhibit Showing 30' Private HRSD Easement (Instr. #110009305) and Variable Width HRSD Utility Easement (Instr. #140006629) Hereby Vacated Property of City of Portsmouth, Portsmouth,

Virginia" dated December 5, 2019, prepared by Johnson, Mirmiran & Thompson, Engineers, which is attached hereto as Exhibit A.

MISCELLANEOUS

The undersigned warrants that this Deed is made and executed pursuant to authority properly granted.

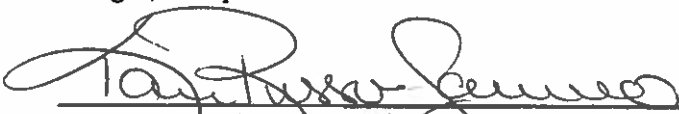
WITNESS the following signatures and seals:

HAMPTON ROADS SANITATION DISTRICT,
a political subdivision of the Commonwealth of
Virginia

By:  (SEAL)
Edward G. Henifin, P.E., General Manager

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

The foregoing instrument was acknowledged before me this 31 day of March,
2020, by Edward G. Henifin, P.E., General Manager, Hampton Roads Sanitation District.

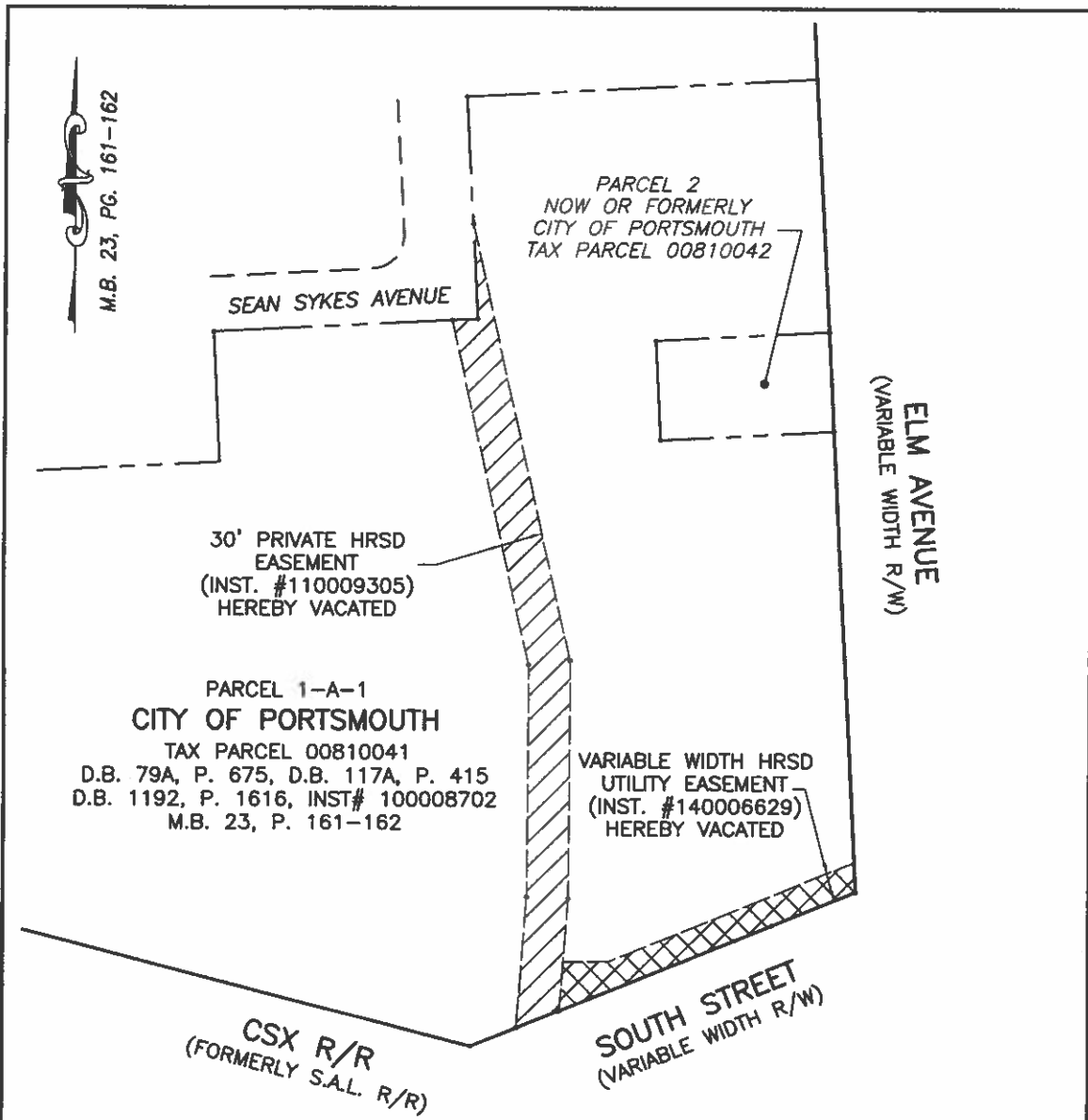

Notary Public

My Commission expires: April 30, 2023
Notary Registration Number: # 7837081

[AFFIX SEAL]

KAREN CHRISTINE RUSSO-SCARANO
NOTARY PUBLIC - REG. #7837081
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES: APRIL 30, 2023

DOC-BEACH/HRSD/DEEDS/DEED OF VACATION OF EASEMENT PORTSMOUTH



DENOTES 30' PRIVATE HRSD
EASEMENT (INST. #110009305)
HEREBY VACATED



DENOTES VARIABLE WIDTH HRSD
UTILITY EASEMENT (INST. #140006629)
HEREBY VACATED

NOTES:

1. THE PURPOSE OF THIS PLAT IS TO VACATE THE 30' PRIVATE HRSD EASEMENT (INST. #110009305) AND THE VARIABLE WIDTH HRSD UTILITY EASEMENT (INST. #140006629)
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY. ALL INFORMATION SHOWN HEREON WAS TAKEN FROM AVAILABLE SOURCES INCLUDING PLATS, DEEDS, GIS DATABASE, AERIAL IMAGERY, ETC.
3. THIS PLAT WAS PREPARED WITHOUT FIELD LOCATION OF SURVEY MONUMENTS OR PROPERTY CORNERS.
4. THE PLAT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ALL MATERS THAT AFFECT SUBJECT PARCEL.

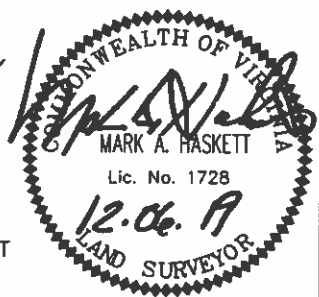


EXHIBIT SHOWING 30' PRIVATE HRSD
EASEMENT (INSTR. #110009305) AND
VARIABLE WIDTH HRSD UTILITY
EASEMENT (INSTR. #140006629)
HEREBY VACATED
PROPERTY OF CITY OF PORTSMOUTH

PORTSMOUTH, VIRGINIA

SCALE: 1" = 100' - DECEMBER 5, 2019

PROJ. #17-10162-022

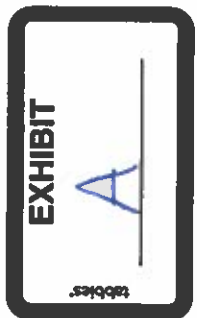
SHEET 1 OF 1



JOHNSON, MIRMIRAN & THOMPSON

Engineering A Brighter Future®

272 BENDIX ROAD SUITE 260 VIRGINIA BEACH, VA 23452
(757) 499-1895 (OFFICE) - (757) 257-0343 (FAX)



VIRGINIA LAND RECORD COVER SHEET

Commonwealth of Virginia VA. CODE §§ 17.1-223, -227.1, -249

FORM A – COVER SHEET CONTENT

Instrument Date: 3/31/2020

Instrument Type: DE-PL

Number of Parcels: 1 Number of Pages: 4

City County PORTSMOUTH
CIRCUIT COURT

Tax Exempt? VIRGINIA/FEDERAL CODE SECTION

Grantor: 58.1-811(A)(3)

Grantee: 58.1-811(C)(4)

Business/Name

1 X Grantor: HAMPTON ROADS SANITATION E

Grantor: _____

1 X Grantee: CITY OF PORTSMOUTH

Grantee: _____

Grantee Address

Name: CITY OF PORTSMOUTH

Address: 801 CRAWFORD PARKWAY

City: PORTSMOUTH State: VA Zip Code: 23704

Consideration: \$0.00 Existing Debt: \$0.00 Actual Value/Assumed: \$0.00

PRIOR INSTRUMENT UNDER § 58.1-803(D):

Original Principal: \$0.00 Fair Market Value Increase: \$0.00

Original Book No.: _____ Original Page No.: _____ Original Instrument No.: _____

Prior Recording At: City County _____ Percentage In This Jurisdiction: 100%

Book Number: _____ Page Number: _____ Instrument Number: _____

Parcel Identification Number/Tax Map Number: 0081-0040

Short Property Description: 30' HRSD EASEMENT ON PARCEL 1-A AND
VARIABLE WIDTH UTILITY EASEMENT

Current Property Address: VACANT PROPERTY, ELM AVE. & SOUTH STREET

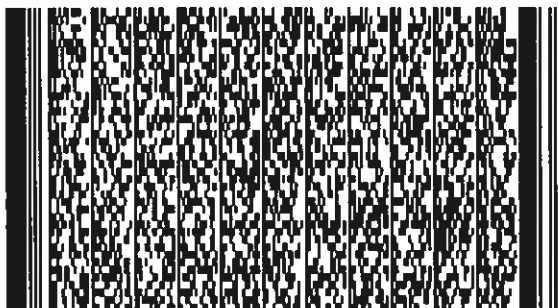
City: PORTSMOUTH State: VA Zip Code: 23704

Instrument Prepared By: KELLAM, PICKRELL, COX & A Recording Paid By: KELLAM, PICKRELL, COX & ANDERS

Recording Returned To: KELLAM, PICKRELL, COX & ANDERSON

Address: 403 BOUSH STREET, SUITE 300

City: NORFOLK State: VA Zip Code: 23510



CLR202004050

2020 APR -9 P 1:41

CYNTHIA P. MORRISON
CIRCUIT COURT CLERK

(Area Above Reserved For Deed Stamp Only)

INSTRUMENT 202004050
RECORDED IN THE CLERK'S OFFICE OF
PORTSMOUTH CIRCUIT COURT ON
APRIL 20, 2020 AT 11:34 AM
CYNTHIA P. MORRISON, CLERK
RECORDED BY: ARP

HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #2

AGENDA ITEM 5. VIRGINIA INITIATIVE PLANT (VIP) INFLUENT MOTOR AND
TEMPORARY CONSTRUCTION EMERGENCY REPAIRS PHOTOS



Virginia Initiative Plant (VIP)
Influent Motor and Temporary
Construction Emergency Repairs

March 24, 2020













HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #3

AGENDA ITEM 6. SUBORDINATE WASTEWATER REVENUE BONDS AND LINES
OF CREDIT RESOLUTION

*Hampton Roads Sanitation District
Resolution of
March 24, 2020*

HAMPTON ROADS SANITATION DISTRICT COMMISSION

A RESOLUTION
AUTHORIZING THE ISSUANCE AND AWARD OF
ONE OR MORE SERIES OF
HAMPTON ROADS SANITATION DISTRICT
SUBORDINATE WASTEWATER REVENUE BONDS
AND AUTHORIZING ENTERING INTO ONE
OR MORE LINES OF CREDIT

Adopted March 24, 2020

**RESOLUTION AUTHORIZING THE ISSUANCE AND
AWARD OF ONE OR MORE SERIES OF HAMPTON
ROADS SANITATION DISTRICT SUBORDINATE
WASTEWATER REVENUE BONDS
AND AUTHORIZING ENTERING INTO ONE
OR MORE LINES OF CREDIT**

WHEREAS, the Hampton Roads Sanitation District (the "District") was duly created under and pursuant to Chapter 407 of the Acts of Assembly of Virginia of 1940, and the Hampton Roads Sanitation District Commission (the "Commission"), created by said Chapter 407, is the governing body of the District; and

WHEREAS, by virtue of Chapter 66 of the Acts of Assembly of Virginia of 1960, as amended (the "Act"), the Commission is authorized and empowered:

- (a) to construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a wastewater treatment system or systems, either within or without or partly within and partly without the corporate limits of the District;
- (b) to issue, at one time or from time to time, revenue bonds, notes or other obligations of the District payable solely from the special funds provided under the authority of the Act and pledged for their payment, for the purpose of paying the cost of a wastewater treatment system or systems and extensions and additions thereto, and providing funds for any other authorized purpose of the Commission, and
- (c) to fix, revise, charge and collect rates, fees and other charges for the use of, and for the services and facilities furnished or to be furnished by, any such wastewater treatment system; and

WHEREAS, as provided by the Act, the District is constituted a political subdivision of the Commonwealth of Virginia and established as a governmental instrumentality to provide for the public health and welfare;

WHEREAS, the Commission has previously authorized the execution and delivery of a Master Trust Indenture, dated as of December 1, 1993, as amended and restated March 1, 2008 (as supplemented and as further amended and supplemented from time to time, the "Senior Trust Agreement"), between the District and The Bank of New York, as Trustee (The Bank of New York Mellon Trust Company, N.A., as successor in interest to The Bank of New York, the "Senior Trustee"), to secure the payment of Senior Obligations (as defined in the Senior Trust Agreement) of the District, such Senior Obligations being payable from the Net Revenues (as defined in the Senior Trust Agreement) of the District;

WHEREAS, the Senior Trust Agreement permits the issuance of Subordinated Indebtedness (as defined in the Senior Trust Agreement), the payment on which will be, in all cases, subordinate and junior in right of payment to the prior payment in full of the Senior Obligations;

WHEREAS, the Commission has previously authorized the closure of the Senior Trust Agreement, prohibiting the further issuance of Senior Obligations, and, pursuant to such authorization, the Senior Trust Agreement has been amended to bar the issuance of additional Senior Obligations;

WHEREAS, to secure the payment of and provide for the issuance of Subordinated Indebtedness, the Commission authorized the execution and delivery of a Trust Agreement, dated as of October 1, 2011 (the "Original Trust Agreement"), as amended and restated as of March 1, 2016, as further amended and supplemented (the Original Trust Agreement, as so amended, restated and supplemented, the "Trust Agreement"), each by and between the District and The Bank of New York Mellon Trust Company, N.A., as successor trustee (in such capacity, the "Trustee"), to provide for the issuance of Parity Obligations (as defined in the Trust Agreement);

WHEREAS, the District has heretofore issued Senior Obligations in accordance with, and which remain outstanding under, the Senior Trust Agreement and Parity Obligations under the Trust Agreement, including Parity Obligations bearing interest at a variable rate that may be tendered to the District for purchase from time to time prior to the maturity thereof (the "Variable Rate Obligations");

WHEREAS, the District has entered into a Master Financing Agreement, dated as of February 1, 2016, with the Virginia Resources Authority, as administrator of the Virginia Water Facilities Revolving Fund ("VRA"), as from time to time amended and supplemented (as so amended and supplemented, the "VRA Master Financing Agreement");

WHEREAS, the VRA Master Financing Agreement contains covenants of the District relating to Senior Obligations and Parity Obligations (collectively, the "VRA Local Bonds") issued by the District to VRA to finance various District projects;

WHEREAS, the District currently maintains a line of credit with a bank, and such line of credit has a stated expiration date of June 30, 2020;

WHEREAS, the District has a Capital Improvement Program (as it may be amended from time to time, the "Capital Improvement Program" or the "CIP") that currently anticipates capital spending of up to \$235,000,000 for projects identified in the CIP ("Projects") through the fiscal year ending June 30, 2021;

WHEREAS, the Commission meets approximately once per calendar month;

WHEREAS, in recent weeks the financial markets have experienced unusual volatility relating to, among other things, the emerging world-wide public health crisis, and such volatility may from time to time present the District with opportunities relating to its debt program that are in the District's best interests and that require the ability to act more quickly than the Commission can practicably meet;

WHEREAS, the Commission has determined to provide for the issuance under the Trust Agreement, at one or more times, of one or more series, on a taxable or tax-exempt basis, of Parity Obligations of the District (the "Refunding Obligations"), for the purpose of providing

funds, together with other available funds, to (i) to refund any or all Senior Obligations and Parity Obligations (including VRA Obligations and Variable Rate Obligations) (collectively, the “Refunding Candidates”) and (ii) pay certain expenses incurred in connection with the issuance of the Refunding Obligations by the District;

WHEREAS, the Commission has determined to provide for the issuance under the Trust Agreement, at one or more times, on a taxable or tax-exempt basis, of one or more series of Parity Obligations (the “New Money Obligations” and, together with the Refunding Obligations, the “2020 Bonds”) in an aggregate principal amount not to exceed \$235,000,000 to provide financing for Projects described in the Capital Improvement Program;

WHEREAS, each series of 2020 Bonds will be issued pursuant to a Supplemental Trust Agreement (each, a “Supplemental Agreement”), between the District and the Trustee;

WHEREAS, the Commission has determined that 2020 Bonds may be sold either through a negotiated underwriting with one or more of the investment banking firms replying to the District’s request for proposals for investment banking services, dated April 27, 2018, to be selected by a Delegate (as defined below) in accordance with the provisions of Section 3 hereof (the investment banking firm or firms so selected, the “Underwriters”) or in a competitive sale in accordance with Section 3;

WHEREAS, the Commission has determined that the District may enter into to one or more lines of credit (each, “Line of Credit”) with one or more banks or other financial institutions in an aggregate principal amount of up to \$285,000,000 for any purpose, including but not limited to (i) providing financing for Projects, (ii) purchasing Variable Rate Bonds, (iii) refunding any of the Refunding Candidates, (iv) paying all or any portion of the principal of or interest on any Senior Obligation or Parity Obligation, (v) taking any other action permitted by the Act, the Senior Trust Agreement, the Trust Agreement or the VRA Master Financing Agreement; and

WHEREAS, the District’s obligation to make payments with respect to draws on any Line of Credit will constitute a Junior Obligation within the meaning of the Trust Agreement and will be expressly subordinate and junior to the Lien on Net Revenues Available for Debt Service created pursuant to Section 701(a) thereof;

Now, Therefore, the HAMPTON ROADS SANITATION DISTRICT COMMISSION DOES HEREBY RESOLVE, as follows:

Section 1. Definitions. Capitalized words and terms used in this Resolution and not defined herein shall have the same meanings in this Resolution as such words and terms are given in the Trust Agreement.

Section 2. Authorization of 2020 Bonds. In order to provide funds required to (i) finance all or any part of the cost of Projects, (ii) refund all or a portion of the Refunding Candidates and (iii) pay certain expenses incurred in connection with the 2020 Bonds by the District and pursuant to the authority granted to it by the Act, the District hereby authorizes the issuance at one or more times and in one or more series of Hampton Roads Sanitation District Subordinate Wastewater Revenue Bonds, [Refunding] Series 2020[] [(Federally Taxable)] (the blank to be completed

with a letter indicating the appropriate series), in an aggregate principal amount not to exceed, (i) in the case of the New Money Obligations, Two Hundred and thirty-Five Million Dollars (\$235,000,000), and (ii) in the case of the Refunding Obligations, not in excess of the aggregate principal amount to be used to pay the principal amount of, premium, if any, and interest on the Refunding Candidates, through the earlier to occur of maturity or the redemption date thereof, refunded with such Refunding Obligations (and to pay the costs of issuing such Refunding Obligations), in each case, dated as of such date, maturing on such dates in such years not later than thirty-five (35) years from their date of issuance and in such principal amounts and bearing interest at such rates, on a federally taxable or tax-exempt basis, all as determined by the Chairman of the Commission, Vice Chairman of the Commission, the General Manager of the District and the Director of Finance of the District (each, a “Delegate”), any of whom may act, prior to the execution of the Bond Purchase Agreement (as defined in Section 3 below), or in the case of a competitive sale, prior to the acceptance of a bid relating to such series of 2020 Bonds and evidenced in the Bond Purchase Agreement or notification of award, as applicable, and the Supplemental Agreement relating to such series of 2020 Bonds.

The Commission hereby determines that the issuance of each series of the 2020 Bonds will be in the best interests of the District.

The 2020 Bonds shall be issued as fully registered bonds in denominations of \$5,000 or any whole multiple thereof or in any other denominations determined by the Delegates. The 2020 Bonds shall be issuable in book-entry form as provided in the Trust Agreement. Payments of principal of, premium, if any, and interest on the 2020 Bonds shall be forwarded by the Bond Registrar to the registered owners of the 2020 Bonds in such manner as is set forth in the Trust Agreement.

Each series of 2020 Bonds will be authorized and issued in accordance with a Supplemental Agreement in substantially the form executed by the District in connection with the issuance of the District’s Subordinate Wastewater Revenue Bonds, Refunding Series 2019A (Federally Taxable), a copy of which supplemental agreement has been presented at the meeting of the Commission in which this Resolution was approved, with such changes, modifications and deletions as such Delegate, with the advice of counsel, may deem necessary and appropriate.

Section 3. Method of Sale. (a) *Negotiated Sale Delegation.* Any series of 2020 Bonds may be sold by negotiated sale with one or more Underwriters. A Delegate, acting in consultation with PFM Financial Advisors LLC, Financial Advisor to the District (the “Financial Advisor”), is authorized to select such Underwriters, provided that each firm so selected shall have submitted a response to the District’s request for proposals for investment banking services, dated April 27, 2018, that has been deemed complete in all material respects. If a series of 2020 Bonds is to be sold in a negotiated sale, a Delegate is authorized to execute a Bond Purchase Agreement with respect to each such series of the 2020 Bonds in substantially the form executed by the District in connection with the issuance of the District’s Subordinate Wastewater Revenue Bonds, Refunding Series 2019A (Federally Taxable) (the “Bond Purchase Agreement”), a copy of which has been presented at the meeting of the Commission in which this Resolution was approved, with such changes, modifications and deletions as such Delegate, with the advice of counsel, may deem necessary and appropriate, including, but not limited to such changes as may be necessary or desirable in the case such 2020 Bonds are to be issued on a tax-exempt basis.

(b) *Competitive Sale Delegation.* Any series of 2020 Bonds may be offered for sale through competitive bidding. If a series of 2020 Bonds is determined to be sold in a competitive sale, the Secretary of the Commission is hereby authorized, if authorized by a Delegate and recommended by the Financial Advisor to be beneficial for the sale of such series of 2020 Bonds, to cause one or more notices calling for bids for the purchase of the bonds, to be published. Each such notice of sale shall be substantially in the form of the notice of sale used in connection with the issuance of the District's Subordinate Wastewater Revenue Bonds, Series 2018A, with such changes, modifications and deletions as a Delegate, with the advice of counsel, may deem necessary and appropriate (the "Notice of Sale"), a copy of which has been presented at this meeting. Alternatively, the Secretary may cause to be published a summary of the principal terms of the notices. Bids shall be received electronically via the BiDCOMP/Parity Competitive Bidding System or similar electronic based competitive bidding system. The Commission delegates to a Delegate the authority to accept the lowest bid (determined in accordance with the Notice of Sale) for such series of 2020 Bonds subject to each of the following conditions: (i) a Delegate shall have determined that the bid conforms in all material respects to the requirements of the Notice of Sale, (ii) a Delegate shall have determined that the bid to be accepted is the lowest bid conforming to the terms of the Notice of Sale, (iii) the Financial Advisor to the District shall have recommended that the lowest conforming bid be accepted, and (iv) the Commission shall not then be in special session called for the purpose of accepting bids (the Commission not to be deemed in special session if less than a quorum is present and voting).

Section 4. Redemption. A Delegate is hereby authorized to determine the optional redemption and make-whole redemption provisions of each series of the 2020 Bonds, if any, as such Delegate, in consultation with the Financial Advisor, in writing, may deem advisable, and the Delegate may, with the advice of the Financial Advisor and counsel to the District, provide that such series of the 2020 Bonds (or any portion thereof) shall not be subject to optional or make-whole redemption before their respective maturities. A Delegate may further determine that any term 2020 Bonds shall be subject to mandatory sinking fund redemption at a redemption price and shall have such amortization requirements as determined by such Delegate. All such determinations by a Delegate shall be determined prior to the execution of the Bond Purchase Agreement or, in the case of a competitive sale, the acceptance of a bid to purchase, relating to such series of 2020 Bonds.

Section 5. Application of Bond Proceeds. The proceeds of the 2020 Bonds shall be applied as provided in the related Supplemental Agreement and, in the case of Refunding Obligations the related Escrow Deposit Agreement (as defined below). If any Refunding Obligations are issued, a Delegate is authorized to execute one or more Escrow Deposit Agreements, each by and between the District and a national banking association or similar bank or trust company qualified to do business in the Commonwealth, in substantially the form executed by the District in connection with the issuance of the District's Subordinate Wastewater Revenue Bonds, Refunding Series 2019A (Federally Taxable) (the "Escrow Deposit Agreement"), a copy of which has been presented at the meeting of the Commission in which this Resolution was approved, with such changes, modifications and deletions as such Delegate, with the advice of counsel, may deem necessary and appropriate.

Section 6. Authorization of Basic Documents. The forms, terms and provisions of each of the Supplemental Agreement, the Bond Purchase Agreement, the Notice of Sale, the Continuing Disclosure Agreement and the Escrow Deposit Agreement (collectively, the “Basic Documents”) are hereby approved in all respects, and the District Representatives (hereinafter defined) are hereby authorized and directed to execute and deliver the Basic Documents with respect to each series of 2020 Bonds in substantially the forms presented to this meeting, or as otherwise provided by this Resolution, together with such changes, modifications and deletions as such District Representatives, with the advice of counsel, may deem necessary and appropriate; such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the District.

Section 7. Refunding Candidates. A Delegate is authorized to determine the Refunding Candidates to be refunded with the proceeds of any series of the 2020 Bonds (such Refunding Candidates, the “Refunded Bonds”) or with a draw on a Line of Credit based on the following criterion: based on a determination by the Financial Advisor, in writing, if any of the Refunding Candidates are to be refunded, the aggregate net present value debt service savings achieved as a result of refunding such Refunding Candidates with the proceeds of the Refunding Bonds shall be equal to at least three percent (3%) of the par amount of the Refunded Bonds; provided, however, that the Commission hereby determines that it will be in the best interests of the District to refund any such Refunding Candidates without meeting the foregoing criterion in the case that a Delegate, with the advice of the District’s Financial Advisor, determines that (i) such criterion cannot reasonably be calculated (for example in the case of variable rate or balloon indebtedness) or (ii) it is otherwise in the District’s best interests to refund such Refunding Candidate without regard to such criterion.

Section 8. Execution of Bonds. The form of the 2020 Bonds is to be similar to the form of bond set forth in the Supplemental Agreement and is hereby approved in all respects, and the Chairman or Vice Chairman and the Secretary or any Assistant Secretary of the Commission are hereby authorized and directed to execute, by manual or facsimile signature, as provided in such forms, and to deliver to the Bond Registrar for authentication on behalf of the District, the 2020 Bonds in definitive form for each series of the 2020 Bonds, with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary, appropriate and consistent with the Trust Agreement and the related Supplemental Agreement; such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the District.

Section 9. Authorization and Delivery of the Bonds. Upon their execution in the form and manner set forth in the Trust Agreement, the 2020 Bonds of each series shall be deposited with the Bond Registrar for authentication, and the Bond Registrar is hereby authorized and directed to authenticate such series of 2020 Bonds and, upon the due and valid execution of the Basic Documents, the Trustee shall cause the Bond Registrar to deliver such series of 2020 Bonds to or for the account of The Depository Trust Company, New York, New York, for the account of the Underwriters, in accordance with and subject to the provisions of Section 209 of the Trust Agreement.

Section 10. Official Statements. The form of the Preliminary Official Statement in substantially the form executed by the District in connection with the issuance of the District's Subordinate Wastewater Revenue Bonds, Refunding Series 2019A (Federally Taxable) (the "Preliminary Official Statement"), a copy of which has been presented at the meeting of the Commission in which this Resolution was approved, with such updates, changes, modifications and deletions as such Delegate, with the advice of counsel, may deem necessary and appropriate is hereby approved, and a Delegate is hereby authorized to approve the terms of and publish a Preliminary Official Statement with respect to each series of the 2020 Bonds, as updated to reflect any subsequent events if any series of 2020 Bonds is to be sold after the first series of 2020 Bonds, describing the 2020 Bonds and substantially in the same form as the Preliminary Official Statement presented to this meeting, and deem "final" such Preliminary Official Statement for purposes of Rule 15c2-12 under the Securities Exchange Act of 1934, as amended; and a Delegate is hereby authorized to execute an official statement (the "Official Statement") with respect to each series of 2020 Bonds in substantially the form of the deemed "final" Preliminary Official Statement relating to such series of the 2020 Bonds, together with such changes, modifications and deletions as such Delegate, with the advice of counsel, may deem necessary or appropriate; and the District hereby approves and authorizes the distribution and use of copies of the Official Statement and the Basic Documents in connection with such sale.

Section 11. District Representatives. Each of the Chairman of the Commission, Vice Chairman of the Commission, General Manager and Director of Finance are hereby appointed a District Representative within the meaning of such term under the Trust Agreement, with full power to carry out the duties set forth therein. Any one or more of the District Representatives may act for and on behalf of the District.

Section 12. Securities Depository. The Depository Trust Company, New York, New York, is hereby appointed as the initial Securities Depository for the Bonds, with Cede & Co., a nominee thereof, being the initial Securities Depository Nominee and initial registered owner of each series of the 2020 Bonds.

Section 13. Lines of Credit. The Delegates are each authorized to enter in to one or more Lines of Credit with one or more banks or other financial institutions in an aggregate principal amount of up to \$285,000,000 for any purpose, including but not limited to (i) providing financing for Projects, (ii) purchasing Variable Rate Bonds, (iii) refunding any of the Refunding Candidates, (iv) paying all or any portion of the principal of or interest on any Senior Obligation or Parity Obligation, (v) taking any other action permitted by the Act, the Senior Trust Agreement, the Trust Agreement or the VRA Master Financing Agreement. A Line of Credit may provide that obligations thereunder bear interest at fixed or variable rates or permit the issuance of both fixed and variable rates (determined by reference to one or more market indices or otherwise as determined by a Delegate), with a stated expiration date, repayment, prepayment, draw-down and other terms to be determined by a Delegate, in consultation with the District's Financial Advisor, such determination to be conclusively proven by such Delegate's execution and delivery of the documents relating to such Line of Credit.

Section 14. Further Actions. The Delegates and the District Representatives are each authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary or appropriate to effectuate the transactions contemplated by the Basic Documents, the Trust Agreement, the VRA Master Financing Agreement and the Official Statement. In addition, the Delegates and the District Representatives are each authorized (i) to amend, supplement, or replace any Basic Documents, the Trust Agreement, the VRA Master Financing Agreement or any other document or agreement hereinbefore or hereinafter entered into by the District in connection with any Senior Obligation, Parity Obligation or other Indebtedness (each as defined in the Trust Agreement) of the District, (ii) to obtain one or more Credit Facilities (as defined in the Trust Agreement), in each case as such Delegate or District Representative, with the advice of counsel and the Financial Advisor, may deem necessary or appropriate or otherwise in the District's best interests or (iii) to enter into one or more Remarketing Agreements, in connection with any Parity Obligations issued or reissued as "Variable Rate Indebtedness" (as defined in the Trust Agreement), such Remarketing Agreements to be in substantially in the form executed in connection with the District's Subordinate Wastewater Revenue Bonds, Series 2016B, with such changes, modifications and deletions as a Delegate, with the advice of counsel, may deem necessary and appropriate (each, a "Remarketing Agreement"), a copy of which has been presented at this meeting.

Section 15. Delegates' Certificate. Each Delegate may execute a certificate or certificates evidencing the determinations made or other actions carried out pursuant to the authority granted in this Resolution, and any such certificate shall be conclusive evidence of the actions or determinations as stated therein.

Section 16. Ratification of Prior Acts. The actions heretofore taken by the District Representatives in connection with the proposed issuance of the 2020 Bonds or the documents relating to any Line of Credit are hereby ratified.

Section 17. Sunset Provision. No Line of Credit may be entered into, and no series of 2020 Bonds may be issued, pursuant to the authority provided by this Resolution after December 31, 2020.

Section 18. Rate Schedule. In compliance with Section 22 of the Act, incorporated herein the same as if set forth verbatim herein is the current "Rate Schedule For all Wastewater and Associated Charges effective July 1, 2019" for the use of, and for the services and facilities furnished or to be furnished by, the wastewater disposal system or systems and the wastewater improvements, for which the 2020 Bonds are to be issued. Such schedule appears in full on the District's website, www.hrsd.com.

**RESOLUTION AUTHORIZING THE ISSUANCE AND
AWARD OF ONE OR MORE SERIES OF HAMPTON
ROADS SANITATION DISTRICT SUBORDINATE
WASTEWATER REVENUE BONDS
AND AUTHORIZING ENTERING INTO ONE
OR MORE LINES OF CREDIT**

Section 19. Effective Date. This Resolution shall take effect immediately upon its passage.

[END OF RESOLUTION]

Adopted by the Hampton Roads Sanitation District Commission on March 24, 2020.

STEVE C. RODRIGUEZ
Acting HRSD Commission Chair (Please Print)


Acting HRSD Commission Chair (Signature)



HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #4

AGENDA ITEM 8. NEW BUSINESS – EMERGENCY COMMISSION PROCEDURES
RELATED TO COVID-19

- [RESOLUTION](#)
- [COMMISSION GOVERNANCE GUIDELINES](#)



RESOLUTION

Emergency Commission Procedures Related to COVID-19

WHEREAS, Governor Northam issued Executive Order Number Fifty-One (2020) on March 12, 2020 declaring a state of emergency in the Commonwealth due to the novel Coronavirus (COVID-19); and

WHEREAS, The Department of Homeland Security, Cybersecurity and Infrastructure Security Agency (CISA) has classified wastewater treatment as a critical infrastructure industry with a special responsibility to maintain operations during the COVID-19 response; and

WHEREAS, HRSD's enabling act grants broad powers to the HRSD Commission for the benefit of the inhabitants of the Commonwealth and for the promotion of their safety, health, welfare, convenience and prosperity, performing an essential governmental function; and

WHEREAS, the Attorney General, Mark A. Herring rendered an official advisory opinion regarding holding meetings solely by electronic communications on March 20, 2020 in which his opinion limited electronic meetings to only "decisions that must be made immediately and where failure to do so could result in irrevocable public harm;" and

WHEREAS, actions required to minimize spread of COVID-19 require implementing social distancing concepts at meetings of the HRSD Commission, including limiting total number of people assembled, maintaining adequate personal space between all participants, limiting total meeting time and other actions that may be implemented as the response to COVID-19 evolves; and

WHEREAS, certain actions must be taken by the Commission on a regular basis to maintain operations ensuring protection of public health and the environment and failure of the Commission to meet and act due to COVID-19 related issues could threaten continued HRSD operations, now, therefore, be it

RESOLVED by the HRSD Commission that it hereby authorizes the General Manager (or his designee) to act on behalf of the Commission for all items requiring Commission approval in accordance with the HRSD Governance Guidelines with the following exceptions:

SECTION 3. COMMISSION ACTIONS, A. Commission Approval Items:

1. Policies
2. Annual Operating Budget
3. Capital Improvement Program

- 5. Schedule of rates including facility charges
- 8. i. Real Property
 - (1) Acquisition by condemnation
- 10. Personnel
 - a. Compensation of General Manager
- 11. Regulations

This authorization shall remain in effect through July 28, 2020 unless sooner amended or rescinded by further Commission action, and be it

RESOLVED FURTHER, that the Commission Governance Guidelines be hereby amended to remove any limitations on the use of a consent agenda to receive Commission approval during the regularly scheduled April, May and June 2020 to facilitate expedited meetings during the COVID-19 response should the meetings be held; and be it

RESOLVED FURTHER, that the General Manager, in consultation with the Commission Chair may elect to cancel the regularly scheduled April, May and June 2020 meetings due to COVID-19 related issues without further Commission action.

Adopted by the HRSD Commission on the twenty-fourth day March 2020.



Stephen C. Rodriguez
Acting HRSD Commission Chair



HRSD Commission Governance Guidelines

The Commission is charged with managing and controlling the functions, affairs and property of the Hampton Roads Sanitation District (HRSD). HRSD's operation is accomplished by its employees under the direct supervision of the General Manager. These governance guidelines are intended to support the Commission in its oversight role, which is set forth in the Acts of Assembly. Some additional Commission responsibilities are specified in HRSD's Trust Agreements, required by federal law or mandated by the Virginia Public Procurement Act.

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

SECTION 1. ROLE AND FUNCTION OF THE COMMISSION

A. Composition

1. The Commission consists of eight members appointed by the Governor of Virginia to four-year terms.
2. At the time of their appointment, Commissioners shall reside in the locality from which they were appointed. Moving from this locality terminates the appointment.
3. With the exception of the aforementioned residency restriction, a Commissioner's term continues until the successor is appointed. Any person appointed to fill a vacancy shall serve for the unexpired term.
4. Commissioners are eligible for reappointment without limitation to the number of terms. Members may be suspended or removed at the Governor's pleasure.

B. Structure

1. The Commission shall annually elect one of its members as chair and another as vice-chair.
2. The Commission's committees are (1) Finance and (2) Operations and Nominations (O&N). These committees report as needed to the full Commission. The Commission may elect to form a new standing or special committee or to disband an existing committee.
 - a. The Finance Committee shall review the Comprehensive Annual Financial Report; ensure the annual audit is completed and receive the audit report from the external auditor; review the work plan and receive reports from the audit firm performing internal audits; review the financial forecast and the annual operating and capital budgets

HRSD Commission Governance Guidelines

and report out to the full Commission prior to Commission action on the annual budgets; participate in selection of internal and external auditors; and other financial related matters as may be referred to the committee by the chair.

- b. The O&N Committee shall prepare a slate of officers for Commission consideration annually; review the Governance Guidelines on a regular basis; review the Remote Participation Policy annually; review the Ethics Policy; and review other Commission policies as required or directed by the chair.
3. The Commission chair annually appoints the committee members and chairs. Committees are composed of two Commissioners and both are required for a quorum. All Commissioners are invited to participate in all Committee meetings.

C. Operation

1. The Commission has the authority to adopt bylaws and to make rules and regulations for the management of its affairs and the conduct of its business.
2. Unless otherwise announced, the Commission meets on the fourth Tuesday of each month January through November and on the third Tuesday of December. Special meetings are held when necessary. The General Manager sets the meeting agendas with advice from the Department Directors and the chair. Agendas, with any relevant accompanying information or reports, are distributed to the Commissioners prior to meetings for review. When circumstances require, items may be added to the agenda after it has been distributed.
3. Four members shall constitute a quorum.
4. The rules contained in the current edition of ***Rosenberg's Rules of Order*** shall govern the Commission in all cases to which they are applicable and in which they are not inconsistent with state law or any special rules of order the Commission may adopt.

D. Commissioner Policies

1. Newly appointed Commissioners will receive a briefing from the General Manager and Department Directors regarding matters related to HRSD's mission and core services. At a minimum, Commissioners are briefed on operations, financial matters and strategic directions. The Commission Secretary will provide information related to [Virginia's Freedom of Information Act](#) and Commission membership. In addition, new Commissioners shall tour HRSD facilities as their schedules permit and be

HRSD Commission Governance Guidelines

introduced to the chief elected officials of their localities as appropriate and practical to facilitate effective working relationships.

2. Commissioners are expected to devote as much time and attention as necessary to discharge their duties. This includes attending all monthly Commission meetings and the meetings of any committees on which they may serve. Commissioners should notify the Commission Secretary whenever they are unable to attend a scheduled meeting. Commissioners may participate remotely in accordance with the Remote Participation Policy. Commissioners must notify the Chair of their desire to participate remotely prior to the meeting. Commissioners also may be asked to participate in special events and to represent HRSD at public meetings.
3. Commissioners shall be mindful of the best interest of the HRSD service area at large as opposed to those of the localities in which they reside.
4. At the request of the Commission, individual Commissioners may serve as liaisons to officials in the communities in which they reside or other localities within HRSD's service area.
5. Commissioners receive no salary but are compensated for travel and expenses associated with meeting attendance at the rate paid to members of the Commonwealth Transportation Board.
6. Each Commissioner shall be covered by a public official's liability policy paid for by HRSD.
7. Commissioners are expected to recuse themselves from discussion and abstain from voting on matters in which they may have a personal or professional conflict, and to announce the recusal or abstention in advance.

E. Responsibilities

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

1. To construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a sewage disposal system or systems.
2. To issue revenue bonds, notes or other obligations.
3. To fix and collect rates, fees and other charges for the services.
4. To acquire land, structures, property, rights, rights-of-way and easements by purchase, lease, grant or the exercise of the right of eminent domain.

HRSD Commission Governance Guidelines

5. To employ, in its discretion, consulting engineers, attorneys, accountants, construction and financial experts, managers and other such officers, employees and agents as may be necessary, and to fix their compensation.
6. To sue and to be sued.
7. To prevent any person, jurisdiction or corporation from discharging into District waters any sewage, industrial wastes or other refuse that would pollute these waters.
8. To seek civil penalties or civil charges against owners in violation of pretreatment standards in permits.
9. To make and enter into all contracts and agreements necessary or incidental to the performance of its duties and execution of its powers.
10. The Commission does not have the power to mortgage, pledge, encumber or otherwise dispose of any part of the sewerage system except that which may no longer be necessary or useful.

SECTION 2. HRSD MANAGEMENT AND THE COMMISSION

Commissioners have complete access to the General Manager, who may refer them to Department Directors or other appropriate resources for assistance. The Commission Secretary shall assist Commissioners with matters related to scheduling, expense reimbursement, access to information and meeting attendance.

A. Staff Relations

1. The Commission appoints a General Manager, who serves at the pleasure of the Commission. As the chief administrative officer, the Commission delegates day-to-day operations to the General Manager within the broad framework of Commission established policies and strategies. The Commission shall review the General Manager's performance and set compensation at least annually.
2. The Commission appoints a Secretary and a Treasurer who serve in these roles at the pleasure of the Commission. These appointments are made from existing staff positions. The Commission fixes their compensation through the annual budget process as these positions are in the HRSD position classification and compensation system.
3. The Commission periodically reviews and assesses the compensation paid to all HRSD employees as part of the annual budget process.
4. Establishment and maintenance of appropriate human resource policies have been delegated to the General Manager.

HRSD Commission Governance Guidelines

B. Financial Oversight

1. The Commission approves HRSD's Financial Policy.
2. The Commission approves the Annual Budget, Capital Improvement Program (CIP), Financial Plan and Schedule of Rates.
3. The Finance Committee meets as required to perform their financial oversight duties, including overseeing the Financial and Internal Auditors, and reports to the Commission regarding these activities.

SECTION 3. COMMISSION ACTIONS

A. Commission Approval Items

1. Policies – All policies that govern HRSD business processes, financial practices, service to localities, etc.
2. Annual Operating Budget – Budget policy allows General Manager to transfer between budget object codes within total approved budget without further Commission action. Additional action is only required if total annual operating budget is amended.
3. Capital Improvement Program
 - a. 10-year program without authorization of specific projects
 - b. Authorization of projects in first year without appropriation
 - c. Changes in program that impact first-year projects previously authorized
4. Capital Improvement Projects
 - a. Appropriation of full project funding specific to each project at time first dollar is to be spent
 - b. Changes requiring additional funding
 - c. Changes resulting in significant reduction in scope (greater than 25 percent of appropriation)

HRSD Commission Governance Guidelines

5. Schedule of rates including facility charges
6. Resolutions authorizing issuance of definitive bonds, interim receipts or temporary bonds, notes or other obligations
7. Acceptance or award of grants
8. Procurement
 - a. The HRSD Procurement Policy
 - b. Use of alternative project delivery methods prior to solicitation (Design-Build, Construction Management, etc.)
 - c. Agreements – Contracts, task orders or purchase orders where the total value is projected to exceed \$200,000
 - d. Rejection of bids for all contracts where total value is projected to exceed \$200,000
 - e. Change orders to contracts that will result in changing the total value of the contract inclusive of all change orders to either 125 percent or more of the original contract award amount or \$50,000, whichever is greater
 - f. HRSD use of an existing competitively awarded contract vehicle (State contract, cooperative procurement, General Services Administration, etc.) where the total value of HRSD participation is projected to exceed \$200,000
 - g. Sole Source Procurement – Initial sole source determination for specific vendor, item(s) and location(s) where total value is projected to exceed \$10,000
 - h. Debarment – Review staff recommendation and make the final determination of all firm/contractor debarment, the conditions and length of term for the debarment.

HRSD Commission Governance Guidelines

- i. Real Property
 - (1) Acquisition by condemnation in accordance with the Code of Virginia §15.2
 - (2) Acquisitions by purchase, lease, grant or conveyance
 - (3) Sale, lease or permanent encumbrance of HRSD property
 - (4) Easements or Right of Entry Agreements (temporary or permanent) with value in excess of \$25,000

- 9. Intellectual Property (IP)
 - a. IP rights agreements
 - b. Royalty distribution agreements

- 10. Personnel
 - a. Compensation of General Manager
 - b. Compensation of Treasurer, Secretary and other employees through annual budget process

- 11. Regulations
 - a. HRSD Industrial Wastewater Discharge Regulations
 - b. Enforcement Response Plan

- 12. Selection of Commission consultants
 - a. Legal
 - b. Auditors
 - (1) Financial Auditors
 - (2) Internal Auditors

- 13. Agreements with other entities meeting one of the following criteria:
 - a. Design or construction of infrastructure with a constructed value in excess of \$50,000

HRSD Commission Governance Guidelines

- b. Provides use of real property for temporary (greater than one year) or permanent use
- c. Provides use of personal property valued at more than \$50,000 for temporary (greater than one year) or permanent use
- d. Provides a service or other benefit that spans multiple years
- e. Obligates significant financial resources (\$200,000 or more)
- f. Obligates significant personnel resources (one full time employee or more)
- g. Is or has the potential to be politically significant

B. Commission Recognition Items

- 1. Employees celebrating length of service 20 years and above (in increments of 5)
- 2. New employees Grade 9 and above
- 3. Awards and recognition earned by HRSD
- 4. Awards and recognition granted by HRSD

C. Commission Information Items

- 1. Monthly reports from General Manager and each Department Director
- 2. Monthly Interim Financial Report (included in Director of Finance report)
- 3. Notice of declaration of emergency
- 4. Internal Audit Reports and updates
- 5. Quarterly Investment Report
- 6. Quarterly CIP Update

HRSD Commission Governance Guidelines

SECTION 4. COMMISSION MEETINGS

All meetings of the Commission shall be held in accordance with the Virginia Freedom of Information Act. Remote participation in meetings shall be in accordance with the Remote Participation policy.

A. Commission Meeting Agenda

The Commission meeting agenda shall be prepared by the General Manager and distributed to the Commission typically five calendar days prior to the meeting date. Public notice of the meeting and posting of the agenda shall be in accordance with the Virginia Freedom of Information Act (§ 2.2-3700 et. Seq. of the Code of Virginia). The General Manager shall review the agenda with the chair prior to the meeting.

The agenda shall be structured to ensure efficient and effective use of Commissioner's time and expertise.

1. Full agenda items with briefings may be provided for the following items and other items as deemed appropriate:
 - a. Annual Budget
 - b. Capital Improvement Program
 - c. Individual Capital Improvement Projects when requesting appropriation or additional appropriations to individual Capital Improvement Projects
 - d. Changes in CIP that impact first-year projects
 - e. Schedule of Rates
 - f. Resolutions related to bonds, notes or other obligations
 - g. Resolutions related to certain employee benefit plans
 - h. Acceptance or award of grants
 - i. New, modified, amended or reissued Commission approved policies

HRSD Commission Governance Guidelines

- j. Use of alternative project delivery methods for contracts
 - k. Agreements
 - l. Rejection of bids for contracts
 - m. Real estate acquisitions by condemnation including requisite public hearings
 - n. Real estate acquisitions
 - o. Sale, lease or conveyance of HRSD property
 - p. Intellectual property agreements
 - q. Patent applications
 - r. Changes, amendments or reissuance of the Industrial Wastewater Discharge Regulations or Enforcement Response Plan
 - s. Selection of Commission consultants
 - t. Agreements requiring Commission approval
2. Consent agenda items shall be limited to items meeting the requirements for Commission approval as detailed herein but not typically warranting of a full briefing due to the nature of the action or previous communication with the Commission.
- a. Contract awards
 - b. Contract Change orders
 - c. Task orders
 - d. HRSD use of existing competitively awarded contract vehicle
 - e. Sole source procurement

HRSD Commission Governance Guidelines

3. Informational agenda items (with or without briefings) may be presented with the agenda as appropriate.
 - a. Monthly reports
 - b. Quarterly investment reports
 - c. Emergency declarations
 - d. CIP update
 - e. Strategic Planning Metrics Summary
 - f. Effluent Summary (Monthly and Annual)
 - g. Air Summary (Monthly and Annual)
 - h. Other items as needed

B. Commission Workshops

Workshops shall be scheduled as needed to allow informal dialogue on a topic or narrow range of topics. Appropriate staff shall be available to brief and facilitate as well as provide subject matter expertise. No official actions shall be taken during workshops. Workshops are public meetings and shall be held in conformance with Virginia's Freedom of Information Act.

C. Committee Meetings

Committee meetings shall be scheduled as needed. Committee meetings are public meetings and shall be held in conformance with Virginia's Freedom of Information Act. Remote participation in committee meetings is not allowed. The Commission Chair shall be an ex-officio member of all committees, with voice and vote. However, the Commission Chair shall not be counted in determining the number required for a Committee quorum or in determining whether or not a quorum is present.

HRSD Commission Governance Guidelines

SECTION 5. ANNUAL CALENDAR OF COMMISSION ACTIONS

Action	Schedule
Quarterly CIP Update	January
Finance Committee Meeting to Review Operating Budget	March
Quarterly CIP Update	April
Receive Finance Committee report	April
Appoint Operations & Nominations (O&N) Committee	May
Approve Annual Budget, CIP, Financial Plan and Schedule of Rates	May
O&N Committee Meeting after Regular Meeting	May
O&N Committee Meeting before Regular Meeting	June
Elect Officers	June
Quarterly CIP Update	July
Appoint Finance Committee	July
Finance Committee Meeting to Review Comprehensive Annual Financial Report (CAFR)	September -October
Accept CAFR	September-October
Quarterly CIP Update	October
Diversity Procurement Report	October
Evaluate General Manager's Performance	October

SECTION 6. ADVISORY ROLE OF FORMER COMMISSIONERS

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

SECTION 7. MODIFICATIONS

The operation of HRSD is a dynamic and evolving process. As such, the O&N Committee annually reviews these Guidelines and recommends proposed modifications to the Commission when appropriate and when statutes or regulations dictate changes.

The O&N Committee also annually reviews the schedule of items to be considered by the Commission to ensure effective oversight and efficient meetings.

HRSD Commission Governance Guidelines

SECTION 8. APPENDIX

The most current versions of the following documents are available on HRSD.com or, upon request, in hard copy.

- Budget
- Capital Improvement Program
- Comprehensive Annual Financial Report
- Enabling Act
- Schedule of Rates
- Trust Agreements

HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #5

AGENDA ITEM 11. 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](#)
- e. [Emergency Declaration - Virginia Initiative Plant \(VIP\) Influent Motors Repair Emergency Declaration](#)



March 18, 2020

Re: General Manager's Report

Dear Commissioners:

February seems like a distant memory as I write this report amidst the COVID-19 pandemic response. It was a challenging month as there was significant rainfall on two days during the month that created overflows and treatment issues in the Surry service area. But the most challenging issue during February was the failure of two influent pumps at the Virginia Initiative Plant. Without those pumps we were left with reduced capacity to address peak flows leaving no choice but to declare an emergency to construct temporary bypass pumping facilities. We partnered with our on-call contractor, Bridgeman Civil (formerly TA Sheets) and HDR to design and install a very complex bypass pumping system using 30-inch HDPE piping and a series of Godwin portable pumps. Our staff worked alongside the Bridgeman crew, essentially around the clock, to get this system in place. We are fortunate to have such a great team, including our consultants and contractors (like Bridgeman Civil and HDR) that share our passion for service. Without such dedicated and professional partners HRSD would be challenged to ensure future generations will inherit clean waterways and be able to keep them clean.

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

- A. **Treatment Compliance and System Operations:** The Town of Surry Treatment Plant had three permit exceedances all related to extremely high flows as a result of two rain events. Two weekly maximum cBOD loading limits were missed as was the monthly average. Loading limits are dependent on plant flow (flow x concentration) and with flows approaching 150 percent of plant capacity, there was little that could have been done to avoid exceeding these limits. Other highlights for the month are included in the attached monthly reports.
- B. **Internal Communications:** I participated in the following meetings/activities with HRSD personnel:
1. A meeting to review the draft Newport News property acquisition agreement
 2. Five work center meetings to discuss status of various initiatives and conduct Ethics Policy training
 3. A meeting to discuss operations of the SWIFT Research Center

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4. A meeting to review the proposed program for force main condition assessment
5. A meeting to discuss potential new positions in Water Quality
6. A length of service breakfast celebration
7. Two new employee orientations

C. **External Communications:** I participated in the following meetings/activities:

1. The winter meeting of the Board of Directors for the National Association of Clean Water Agencies (NACWA) and the winter conference
2. A meeting of the Water Agency Leaders Alliance
3. Met with the Virginia Port Authority (VPA) exploring potential SWIFT recharge well sites on VPA property
4. A meeting regarding the Integrated Plan with AquaLaw and Brown and Caldwell
5. The winter meeting of the US EPA Environmental Financial Advisory Board
6. A meeting with the Department of Environmental Quality (DEQ) leadership regarding reporting of data on Discharge Monitoring Reports that fails Quality Assurance/Quality Control procedures
7. The City of Chesapeake State of the City address with Commissioner Rodriguez
8. The monthly meeting of the US Water Alliance One Water Council
9. A meeting with Congresswoman Luria to highlight environmental engineering activities in Hampton Roads

D. **Consent Decree Update:**

EPA provided the terms in which they would be willing to move forward with approval of HRSD's Integrated Plan via email on February 4. We met with our consultants on February 10 and directed them to revise the Integrated Plan in accordance with the terms EPA proposed. An early March submittal date was targeted for the revised plan. We anticipate reaching a final agreement on these terms and the required amendment to the Consent Decree within the next 90 days.

Both of our legislative initiatives have moved through the General Assembly with one signed by the Governor (SB 685) and the other on his desk pending his approval (action deadline is April 11, 2020). A very successful session for HRSD. These two bills will result in direct savings to HRSD, easily totaling millions of dollars over the next 10 years.

SB 685: Tax exemption for certified pollution control equipment and facilities; timing of certification by the state certifying authority. Provides that, upon the request of a political subdivision, the state certifying authority having jurisdiction shall certify the tax-exempt status of certain pollution control equipment and facilities on a prospective basis. The property eligible for such treatment shall be equipment and facilities intended for use by a political subdivision in conjunction with the operation of its water, wastewater, stormwater, or solid waste management facilities or systems. Signed by the Governor on March 2, 2020.

HB 1609: Nutrient and sediment credit generation and transfer; limit certain transfers to private sector. Limits certain transfers of nonpoint nutrient credits to those credits generated by the private sector. The bill provides that while any locality may, without the involvement of a third party, generate its own nutrient or sediment credits and request that such credits be certified by the Department of Environmental Quality, such certifications shall only be used for the purpose of determining whether the project complies with certain credit generation requirements. The bill authorizes any publicly owned water treatment works that is constructing or expanding a treatment facility to permanently retire a portion of its wasteload allocation under certain circumstances. The following language was added to the bill to ensure we would have the ability to use our credits for all SWIFT construction: *Except for a water reclamation and reuse project at a treatment works, no more than 10 pounds per year of phosphorous allocation may be applied toward a single project's postconstruction phosphorus control requirement.*

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 on Tuesday, March 24, 2020 in Virginia Beach.**

Respectfully submitted,

Ted Henifin

Ted Henifin, P.E.
General Manager

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





A. Publicity and Promotion

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

1. HRSD’s expansion to the Eastern Shore
2. HRSD participation in college and career admission event
3. Capital improvements in Small Communities
4. SWIFT addressing climate change

B. Social Media and Online Engagement


1. Metrics

Social Media Metrics February 2020				
METRIC	 FACEBOOK	 LINKEDIN	 TWITTER	 YOUTUBE
Number of Posts *number of published posts	26 +7	3 +3	17 +3	1:39 average view duration
Number of Followers/Likes *total number of fans	1,181 +21	4,871 +22	407 +5	173 +2
Engagement *sum of reactions comments and shares	559 +157	41 +35	45 -75	827 unique viewers +89
Traffic *total clicks on links posted	50 -241	85 +55	32 -247	4.8% click through +7%

2. Top posts for February on Facebook, Twitter and YouTube

Top Tweet earned 1,143 impressions

We're bringing wastewater to drinking water standards and recharging the Potomac Aquifer with one million gallons of treated water a day! Want to see for yourself? ow.ly/WWnWQ50ygtzY Schedule a SWIFT tour today! #SWIFTVA pic.twitter.com/402AsvdKTa




2 11

[View Tweet activity](#) [View all Tweet activity](#)

HRSD
Published by Hootsuite [?] · February 27 at 3:50 PM · 🌐

***** Check out the construction progress on the Woodstock Park Improvement Project. We're super excited about this project and our partnership with Virginia Beach Parks & Recreation! The park closed in June 2019 to begin construction on building a new skate park on the surface of partially buried storage tank and renovate Woodstock Park. #HRSDBuilds



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

9,563 People Reached 1,343 Engagements [Boost Post](#)

👤 Lori Crowe Sharp, Valerie Lauren Jackson and 31 others 9 Shares

👍 Like 💬 Comment ➦ Share

Performance for Your Post

9,563 People Reached

112 Reactions, Comments & Shares 🗨️

77 Like	29 On Post	48 On Shares
8 Love	0 On Post	8 On Shares
7 Wow	4 On Post	3 On Shares
11 Comments	0 On Post	11 On Shares
9 Shares	9 On Post	0 On Shares

1,231 Post Clicks











301 Photo Views	2 Link Clicks 🗨️	928 Other Clicks 🗨️
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NEGATIVE FEEDBACK

1 Hide Post 0 Hide All Posts

0 Report as Spam 0 Unlike Page

Reported stats may be delayed from what appears on posts

Video	Average view duration	Views
1  The Wastewater Treatment Process Oct 22, 2012	1:41 (53.1%)	847
2  HRSD's Woodstock Park Wet Weather Storage Tank Oct 25, 2017	0:47 (74.8%)	54
3  SWIFT Research Center: What is the Potomac Aquifer? Jan 8, 2019	1:53 (40.9%)	44
4  HRSD Employee Testimonials - Robert Jan 9, 2017	0:17 (90.5%)	28
5  SWIFT Research Center Ribbon Cutting Ceremony, May 2018 Jul 3, 2018	1:31 (53.0%)	25
6  Protecting Our Pipelines Oct 29, 2019	3:06 (33.5%)	24
7  Overview of HRSD's Sustainable Water Initiative for Tomorrow Pilot Project Nov 28, 2016	2:25 (60.3%)	24
8  SWIFT Progress, 2016 - 2018 May 21, 2018	1:21 (41.0%)	14
9  2017 SWIFT Research Center Open House Construction Tour Jan 23, 2018	0:57 (72.2%)	14
10  Virtual Tour of HRSD's Virginia Initiative Plant Nutrient Reduction Improvement Project May 13, 2016	1:39 (40.9%)	13

3. Impressions and Visits

- a. Facebook: 20,264 post impressions reaching 19,181 users and Facebook engagement of 559 (472 reactions, 49 shares and 38 comments).
- b. Twitter: 7,858 tweet impressions; 107 profile visits and 13 mentions.
- c. SWIFTVA.com: 1,230 homepage visits (website is now under HRSD.com)
- d. LinkedIn Impressions: 2,353 page impressions and 2,100 post impressions
- e. YouTube: 1,159 views

- f. Next Door unique impressions: 99 post impressions
- g. Blog Posts: 0
- h. Construction Project Page Visits – 945 total visits (not including direct visits from home page, broken down as follows:
 - (1) 574 visits to individual pages
 - (2) 371 to the status page

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

- 1. News Releases/Traffic Advisories/Construction Notices: 9 (seven construction notices and two project updates)
- 2. Advertisements: 0
- 3. Project Notices: 13 (via door hanging/door knocking, mailings and NextDoor posts reaching approximately 1278 residents)
- 4. Project/Community Meetings: 2
 - a. 02/12/20 -- Kiln Creek Homeowners Association quarterly resident meeting, Newport News
 - b. 02/18/20 -- Woodstock Park Skate Design Workshop, Virginia Beach
- 5. New Project Web Pages /Videos: 0

C. Special Projects and Highlights

Director and staff provided a tour of the SWIFT Research Center to Norfolk City Councilwoman Courtney Doyle.

Director and staff provided tours of the SWIFT Research Center to the current CIVIC Leadership Institute Executive Program participants.

Director attended the second open house meeting for the Woodstock Park Skate Design Workshop.

Director and staff, along with engineering, operations and safety staff, hosted approximately 40 students and their parents/guardians at the HRSD Air Rail Administrative offices for an Engineers' Week Open House that featured hands-on learning activities and presentations.

D. Internal Communications

1. Director participated in the following internal meetings and events:
 - a. A partnering session for the Virginia Beach Boulevard Force Main Phase VI project
 - b. Planning meetings for Engineering Week and Infrastructure Week
 - c. Planning meetings for Woodstock Park Design workshop
 - d. Planning meetings for the Pretreatment and Pollution Prevention (P3) Awards luncheon
 - e. Meeting with P3 staff to discuss development of training videos for waste haulers
 - f. Meeting with IT and Engineering staff to develop web page for SWIFT Industry Outreach
 - g. RFP review meeting for Pharmaceutical take back program
 - h. QST, SWIFT QST and DMR meetings
2. Director conducted bi-weekly communications department status meetings and one-on-one staff check in meetings.

E. Metrics

1. Educational and Outreach Activities: 7
 - a. 02/05/20–Jamestown High School Envirothon (10 attendees)
 - b. 02/06/20 – Individual teacher SWIFT Tour, Cape Henry Collegiate, Virginia Beach (one attendee)
 - c. 02/11/20 – SWIFT Tour, Norfolk Councilwoman Doyle (one attendee)
 - d. 02/13/20 – SWIFT Tour, CIVIC Leadership Group (50 attendees)
 - e. 02/22/20 – Engineering Week Open House, Virginia Beach (40 attendees)
 - f. 02/26/20 – SWIFT Tour to UVA Environmental Science students (15 attendees)
 - g. 02/27/20 – SWIFT Tour, Believers Church member (one attendee)
2. Number of Community Partners: 5
 - a. Williamsburg James City County Public Schools
 - b. Cape Henry Collegiate School
 - c. City of Norfolk
 - d. CIVIC Leadership Institute
 - e. University of Virginia

3. Additional Activities Coordinated by Communications Department: 1
 - a. 01/10/20 – Jamestown High School Science Fair
4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	February 2020
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	1.33
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to-Date	Hours / #FTE	37.21
M-5.2	Educational and Outreach Events	Number	7
M-5.3	Number of Community Partners	Number	5

Respectfully,

Leila Rice, APR
 Director of Communications

TO: General Manager

FROM: Director of Engineering

SUBJECT: Engineering Monthly Report for February 2020

DATE: March 9, 2020

A. General

1. Capital Improvement Program (CIP) spending for the seventh month of Fiscal Year (FY) 2020 was below planned spending target. Year-to-date spending is still below the targeted amount for FY 2020.

CIP Spending (\$M):

	Current Period	FYTD
Actual	16.44	77.51
Plan	18.00	105.00

2. The Engineering Department coordinated several activities for National Engineers Week from February 17-22. The week began with a competition to build a Water Structure that acts as an irrigation system. Five teams competed for the award given to the group that could build a water flow device that could pass both water and 10 floating beads. The Egg Drop Competition was held again this year. This was a fun event which included nine contestants. Each entrant was required to create a design to protect an egg from a 20-foot fall. The winner was the entry whose egg survived the fall and whose device weighed the least. The week ended with an Open House for students entitled, "Celebrate Engineers Week." The attendees (Grades 3 through 8) were able to learn about engineering, STEM careers, water and wastewater systems and sustainability. We were able to share this information with 32 young adults and many of their parents during a 2-hour event at HRSD. In addition, the HRSD SharePoint site highlighted a few of our talented Engineers and included information about why they studied this challenging profession. An online game was also held for staff entitled, "What is This?" The competition allowed individuals to guess the purpose of certain unusual design or construction related items. All these activities focused on the need and value of engineering to our community.

B. Asset Management Division

1. The CIP Optimization Model has been finalized along with new project request and business evaluation forms. The CIP Prioritization Criteria was also updated to be consistent with the Asset Management Risk Criteria. All existing projects included in the CIP were scored using this new prioritization criteria tool. New projects recommended for FY 2021 will be scored once the CIP is balanced in March. This model should help us to better scope and plan for CIP projects prior to implementation.
2. The Asset Management Plan Dashboard continues to be developed. This tool will provide information including: Replacement Planning Model summary, risk matrix, asset inventory and condition assessment, lifecycle costs and key performance indicators related to energy use, work orders, maintenance staffing, reliability and failure history. This Dashboard summarizes assets at specific work centers and will allow staff to get a quick update on progress and areas for improvement.

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

1. The Design-Build Team was authorized to proceed with the final design and construction for the Surry Hydraulic Improvements and Interceptor Force Main project. The 60 percent design is complete and the team is focused on completing the design, ordering materials and acquiring easements. A portion of the project, from a local marina to VA Route 10, was previously authorized and is under construction. The team is focused on acquiring construction related approvals and permits with a plan to begin construction soon. The project has a very aggressive schedule with a plan to be complete by June 2022.
2. Construction efforts for the Water Quality Services Building Phase II project continues on schedule. Site and foundation work is underway with portions of the new masonry walls for the stairwells nearing completion. The steel columns to support the structure will be installed in the coming month. The current plan is to complete the project and begin moving staff into this space in March 2021.
3. The James River SWIFT and James River Treatment Plant Advanced Nutrient Reduction Improvements projects were advertised for Design-Build services. The Request for Qualifications was issued on February 9. A Pre-Qualification Conference was held on February 20 with 36 individuals in attendance. Statement of Qualifications are due on March 10 with a goal to determine a short-list of qualified teams by the end of March. In addition to this procurement effort, the final bridging documents are under final review.

These documents will be provided to each short-listed team. Coordination with the City of Newport News continues as does efforts with the Virginia Department of Health regarding the SWIFT treatment.

D. Planning & Analysis Division

1. The Data Analysis Section is working with the Technical Services Division (TSD) to provide data associated with wind forecasting. This effort will alert staff when winds are expected that could result in odor concerns from property owners adjacent to HRSD facilities. This is a proactive effort to alert staff of potential concerns in advance so that resources can be available to verify and address odor issues.
2. The Saltwater Inflow/Infiltration Team (Salt-Chasers) continue their efforts to detect and resolve significant sources of tidal inflow into the sanitary sewer system. A recent source of inflow was found in the local sewer collection system discharging to the Army Base Treatment Plant. A temporary repair was made to the sewer pipe until a permanent repair can be completed. This team is a cross-departmental effort and involves the local jurisdictions and private sewer system owners.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 2
 - a. 02/06/2020 – Staff participated as a judge for the American Council of Engineering Companies (ACEC) Engineering Excellence Awards.
 - b. 02/22/2020 – Staff participated as teachers for the Celebrate Engineers Week event held at HRSD's Main Office.
2. Number of Community Partners: 1
 - a. ACEC
3. Number of Research Partners: 0

4. Metrics Summary:

Item #	Strategic Planning Measure	Unit	February 2020
M-1.4a	Total Training Hours per Full Time Employee (44) - Current Month	Hours / #FTE	1.24
M-1.4b	Total Training Hours per Full Time Employee (44) - Cumulative Fiscal Year-to-Date	Hours / #FTE	26.07
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Number of Community Partners	Number	1
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 February 2020

DATE: March 11, 2020

A. General

1. HRSD received its third upgrade in less than two years on February 7 from Moody's Investors Service. HRSD's senior and subordinate lien debt now both have the same rating with two of the three Rating's Agencies, one notch below triple-A. Fitch still rates our subordinate lien debt one notch lower than the other agencies. While we strive to attain and retain the highest ratings possible, our financial policies target AA medians and reasonable debt service and cash reserve targets. We anticipate these ratings may slip during the peak CIP construction years between 2024 and 2032.
2. The Securities and Exchange Commission (SEC) asked the Director of Finance to participate on a panel regarding continuing disclosures. Apparently, the SEC was impressed that HRSD publishes our monthly financials, which highlights our transparency to bond investors.
3. Water consumption remains slightly higher than budget resulting in higher than budgeted revenues, but is trending downward as it is almost 1.0 percent lower than FY2019 Actuals. The COVID-19 impact is uncertain as we could see an uptick in water consumption with many people staying home and increased hand washing, but this may be offset if people without sick leave are forced to quarantine and become unable to pay their bills or if job losses occur. Interest Income remains higher than budget but the increases are expected to level out as interest rates decline due to COVID-19. Municipal Assistance, at 59 percent, is below budget as a result of lower demand for services, but higher than the prior year's 46 percent. Personal Services, at seventy-one percent, is higher than budget and the prior year since January included three payroll periods; expenses are expected to be within budget by year end. Major repairs expenses and capital asset purchases continue to be significantly lower than budget at this time, since many purchases earlier in the fiscal year related to prior year encumbrances.
4. HRSD's Financial Advisor for our Retiree Health Trust has been making significant moves due to market volatility. They reduced our equity exposure by 20 percent and moved money into cash and fixed income.
5. HRSD staff is working to expedite our WIFIA loan as 30-year US Treasuries are at historic lows.

B. Interim Financial Report

1. Operating Budget for the Period Ended February 29, 2020

	Amended Budget	Current YTD	Current YTD as % of Budget (67% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	\$ 316,217,000	\$ 214,558,617	68%	69%
Surcharge	1,500,000	1,110,165	74%	71%
Indirect Discharge	2,750,000	2,104,947	77%	71%
Fees	2,858,000	2,030,855	71%	68%
Municipal Assistance	725,000	426,483	59%	46%
Miscellaneous	600,000	491,503	82%	127%
Total Operating Revenue	<u>324,650,000</u>	<u>220,722,570</u>	68%	69%
Non Operating Revenues				
Facility Charge	6,160,000	4,342,250	70%	70%
Interest Income	4,000,000	4,320,702	108%	188%
Build America Bond Subsidy	2,400,000	1,121,298	47%	48%
Other	595,000	372,154	63%	34%
Total Non Operating Revenue	<u>13,155,000</u>	<u>10,156,404</u>	77%	88%
Total Revenues	337,805,000	230,878,974	68%	69%
Transfers from Reserves	<u>10,857,750</u>	<u>7,238,500</u>	67%	67%
Total Revenues and Transfers	<u>\$ 348,662,750</u>	<u>\$ 238,117,474</u>	68%	69%
Operating Expenses				
Personal Services	\$ 57,346,225	\$ 40,603,604	71%	67%
Fringe Benefits	24,232,400	16,280,116	67%	65%
Materials & Supplies	8,838,801	5,258,932	59%	64%
Transportation	1,579,921	783,236	50%	60%
Utilities	12,774,299	8,112,605	64%	68%
Chemical Purchases	10,979,218	5,611,392	51%	51%
Contractual Services	46,373,753	20,629,486	44%	43%
Major Repairs	10,847,604	3,742,711	35%	39%
Capital Assets	458,825	82,350	18%	42%
Miscellaneous Expense	3,085,523	3,036,976	98%	55%
Total Operating Expenses	<u>176,516,569</u>	<u>104,141,408</u>	59%	57%
Debt Service and Transfers				
Debt Service	63,544,841	46,555,296	73%	77%
Transfer to CIP	108,341,340	72,227,560	67%	67%
Transfer to Risk management	260,000	173,336	67%	67%
Total Debt Service and Transfers	<u>172,146,181</u>	<u>118,956,192</u>	69%	71%
Total Expenses and Transfers	<u>\$ 348,662,750</u>	<u>\$ 223,097,600</u>	64%	64%

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; 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 February 29, 2020

HRSD - RESERVE AND CAPITAL ACTIVITY

February 29, 2020

	General Reserve			Capital		
	General	Debt Service	Risk Mgmt Reserve	Reserve	Paygo	Debt Proceeds
	Unrestricted	Restricted	Unrestricted	Unrestricted	Unrestricted	Restricted
Beginning - July 1, 2019	\$ 178,937,154	\$ 28,553,343	\$ 3,499,535	\$ 15,266,324	\$ 86,279,809	\$ 14,334,553
Current Year Sources of Funds						
Current Receipts	163,779,606					
Capital Grants					-	
VRA Draws					22,121,278	
Bond Proceeds (includes interest)						36,364
Transfers In	66,355,163		173,336		72,227,560	
Sources of Funds	230,134,769	-	173,336	-	94,348,838	36,364
Total Funds Available	\$ 409,071,923	\$ 28,553,343	\$ 3,672,871	\$ 15,266,324	\$ 180,628,647	\$ 14,370,917
Current Year Uses of Funds						
Cash Disbursements	156,945,405				70,631,591	14,370,917
Series 2019A Refunding	-					
Transfers Out	72,400,896				66,355,163	
Uses of Funds	229,346,301	-	-	-	136,986,754	14,370,917
End of Period - February 29, 2020	\$ 179,725,622	\$ 28,553,343	\$ 3,672,871	\$ 15,266,324	\$ 43,641,893	-

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended February 29, 2020

Classification/ Treatment Service Area	Expenditures Year to Date			Total Expenditures	Outstanding Encumbrances	Available Balance
	Budget	Expenditures prior to 6/30/2019	Expenditures FY 2020			
Administration	\$ 74,799,313	\$ 43,226,276	\$ 2,675,244	\$ 45,901,520	\$ 16,102,927	\$ 12,794,866
Army Base	158,584,000	125,110,560	451,955	125,562,515	2,458,217	30,563,268
Atlantic	132,343,059	88,977,629	13,732,193	102,709,822	7,244,662	22,388,575
Boat Harbor	139,444,401	60,512,133	10,635,910	71,148,043	14,794,988	53,501,370
Ches-Eliz	192,419,583	21,557,919	28,318,753	49,876,672	71,740,482	70,802,429
James River	288,758,687	58,557,889	1,874,578	60,432,467	8,954,296	219,371,924
Middle Peninsula	88,810,297	10,996,758	2,439,889	13,436,647	8,179,747	67,193,903
Nansemond	90,962,641	42,439,857	1,881,104	44,320,961	12,493,439	34,148,241
Surry	45,747,598	1,905,064	4,142,305	6,047,369	3,602,785	36,097,444
VIP	305,678,873	259,851,080	1,232,961	261,084,041	5,008,563	39,586,269
Williamsburg	33,002,437	12,215,242	3,057,696	15,272,938	14,032,088	3,697,411
York River	72,798,339	44,185,737	1,956,778	46,142,515	880,490	25,775,334
General	697,921,094	233,236,782	5,110,196	238,346,978	42,051,894	417,522,222
	<u>\$ 2,321,270,322</u>	<u>\$ 1,002,772,926</u>	<u>\$ 77,509,562</u>	<u>\$ 1,080,282,488</u>	<u>\$ 207,544,578</u>	<u>\$ 1,033,443,256</u>

5. Debt Management Overview

HRSD - Debt Outstanding (\$000's) February 29, 2020

	Principal Jan 2020	Principal Payments	Principal Draws	Trust Agreement	Principal Feb 2020	Interest Payments
Fixed Rate						
Senior	\$ 215,422	\$ -	\$ -		\$ 215,422	\$ -
Subordinate	540,470	(349)	4,313		544,434	(3,675)
Variable Rate						
Subordinate	50,000	-	-		50,000	(43)
Line of Credit						
Total	<u>\$ 805,892</u>	<u>\$ (349)</u>	<u>\$ 4,313</u>	<u>\$ -</u>	<u>\$ 809,856</u>	<u>\$ (3,718)</u>

HRSD- Series 2016VR Bond Analysis February 28, 2020

	SIFMA Index	HRSD	Spread to SIFMA
Maximum	2.30%	2.25%	-0.05%
Average	0.56%	0.55%	-0.01%
Minimum	0.01%	0.01%	0.00%
As of 02/28/20	1.15%	1.20%	0.05%

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

6. Financial Performance Metrics for the Period Ended February 29, 2020

HRSD - UNRESTRICTED CASH

February 29, 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	\$ 242,306,710		501
Risk Management Reserve	\$ (3,672,871)	(8)	493
Reserve	\$ (15,266,324)	(32)	461
Capital (PAYGO only)	\$ (43,641,893)	(90)	371
Net Unassigned Cash	\$ 179,725,622		371

Risk Management Reserve as a % of Projected Claims Cost is 25% YTD compared to 25% Policy Minimum

Days Cash on Hand Policy Minimum is 270-365 days.

HRSD - SOURCES OF FUNDS

February 29, 2020

Primary Source	Beginning	YTD	YTD	YTD	Ending	Allocation of	Credit Quality	Current
	Market Value				Market Value			
	July 1, 2019	Contributions	Withdrawals	Income Earned	February 29, 2020			Yield
BAML Corp Disbursement Account	7,755,006	371,810,417	363,169,850	49,491	16,445,064	8.1%	N/A	0.55%
VIP Stable NAV Liquidity Pool	163,658,801	131,355,162	111,355,162	2,453,154	186,111,955	91.9%	AAAm	1.73%
Total Primary Source	\$ 171,413,807	\$ 503,165,579	\$ 474,525,012	\$ 2,502,645	\$ 202,557,019	100.0%		

VIP Stable NAV Liquidity Pool out performance Va Local Government Investment Pool (the market benchmark) by 0.02% in the month of February.

Secondary Source	Beginning	YTD	YTD	YTD	Ending	YTD	Yield to	
	Market Value				Market Value			Maturity
	July 1, 2019	Contributions	Withdrawals	& Realized G/L	February 29, 2020	Mkt Adj	at Market	
VIP 1-3 Year High Quality Bond Fund	128,529,607	-	66,367,352	1,307,003	63,915,857	62,336,235	1,579,622	1.06%
Total Secondary Source	\$ 128,529,607	\$ -	\$ 66,367,352	\$ 1,307,003	\$ 63,915,857	\$ 62,336,235	\$ 1,579,622	

VIP 1-3 Year High Quality Bond Fund out performed ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) by 0.08% in the month of February.

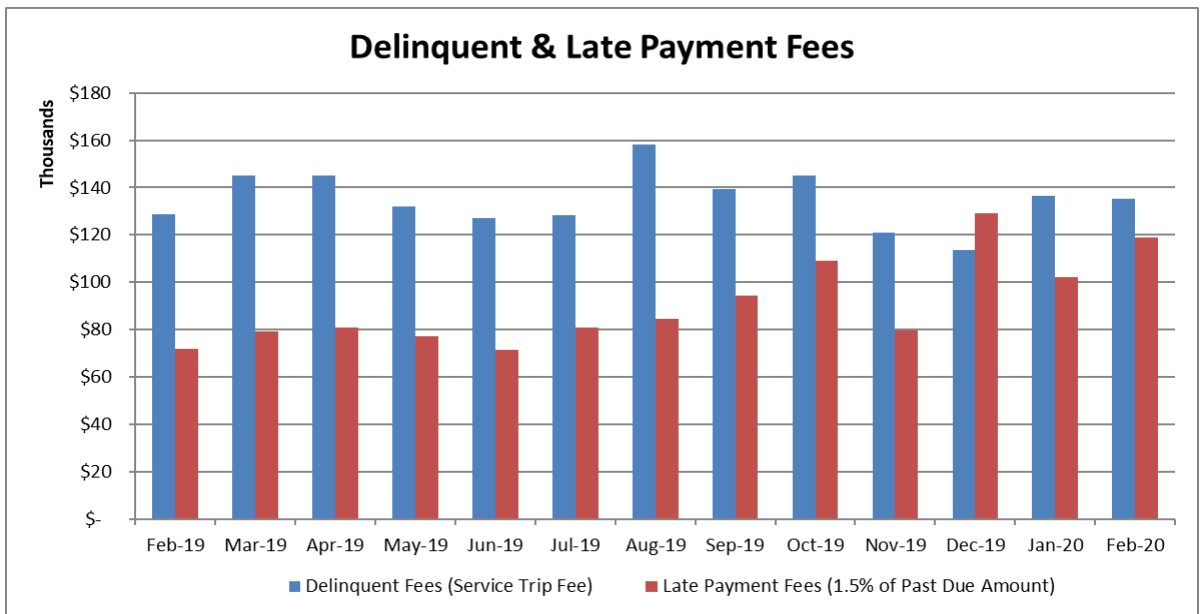
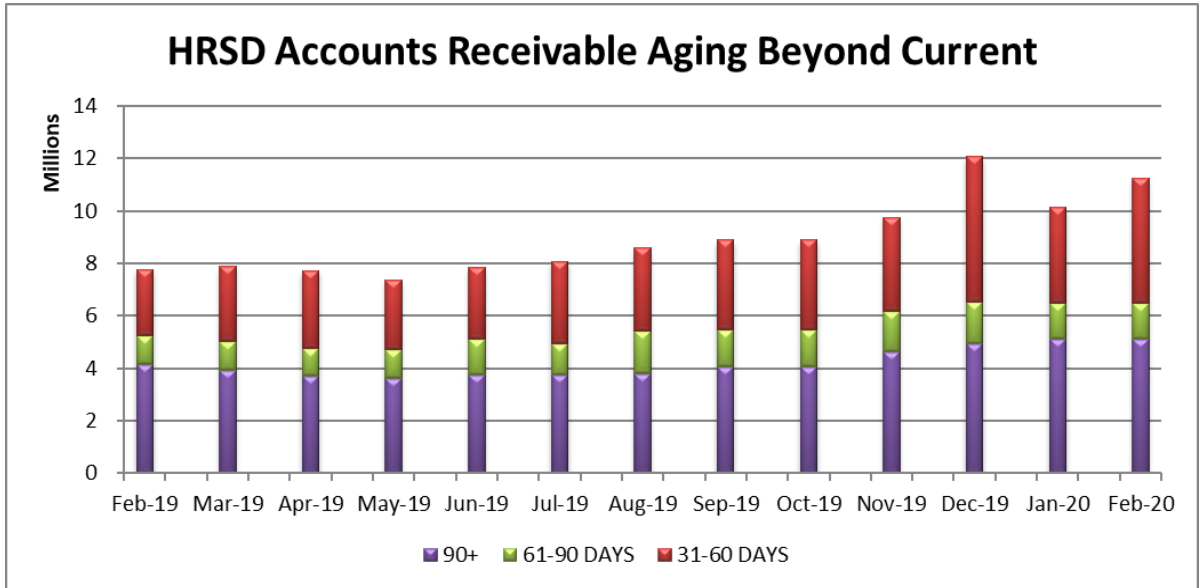
	Total	Fund Alloc
Total Primary Source	\$ 202,557,019	76.0%
Total Secondary Source	\$ 63,915,857	24.0%
TOTAL SOURCES	\$ 266,472,876	100.0%

7. Summary of Billed Consumption

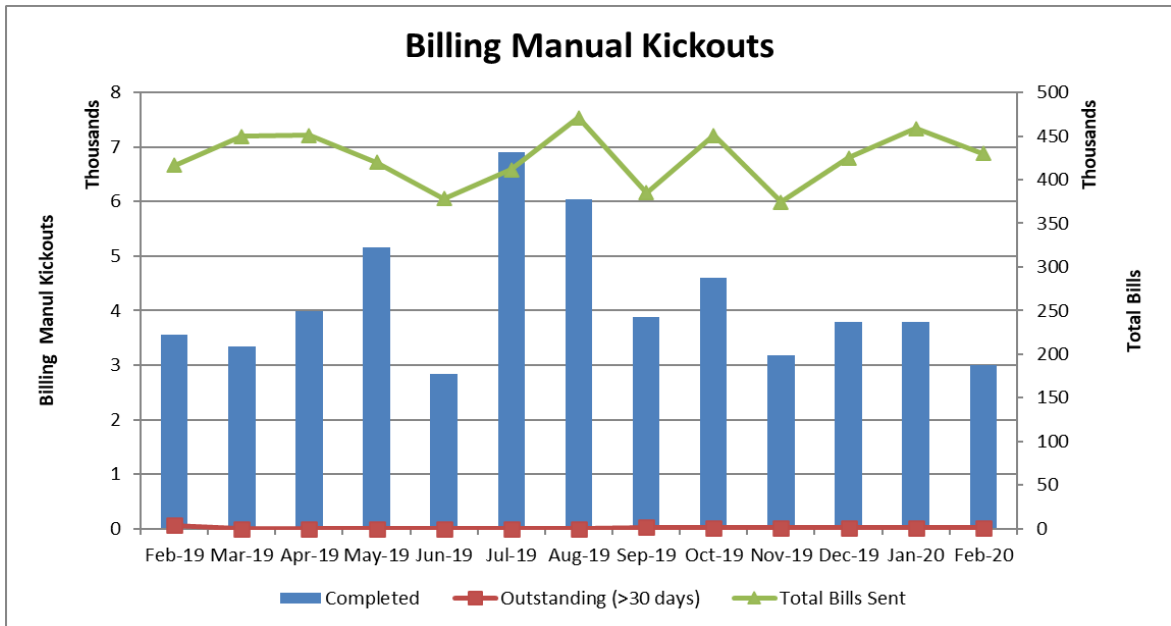
Summary of Billed Consumption (,000s ccf)							
Month	FY2020 Cumulative Budget Estimate	FY2020 Cumulative Actual	% Difference		% Difference		% Difference
			From Budget	Cumulative FY2019 Actual	From FY2019	Cumulative 3 Year Average	From 3 Year Average
July	4,845	5,135	6.0%	5,175	-0.8%	4,940	4.0%
Aug	9,649	10,009	3.7%	10,233	-2.2%	9,815	2.0%
Sept	14,488	14,571	0.6%	14,294	1.9%	14,384	1.3%
Oct	18,842	19,169	1.7%	19,087	0.4%	19,036	0.7%
Nov	22,952	23,309	1.6%	23,249	0.3%	23,278	0.1%
Dec	27,344	27,735	1.4%	27,376	1.3%	27,532	0.7%
Jan	31,535	32,318	2.5%	32,010	1.0%	32,003	1.0%
Feb	36,079	36,222	0.4%	36,551	-0.9%	36,443	-0.6%
March	40,427	-	N/A	40,187	N/A	40,480	N/A
Apr	44,149	-	N/A	44,551	N/A	44,554	N/A
May	48,421	-	N/A	48,790	N/A	48,786	N/A
June	52,985	-	N/A	53,172	N/A	53,280	N/A

C. Customer Care Center

1. Accounts Receivable Overview

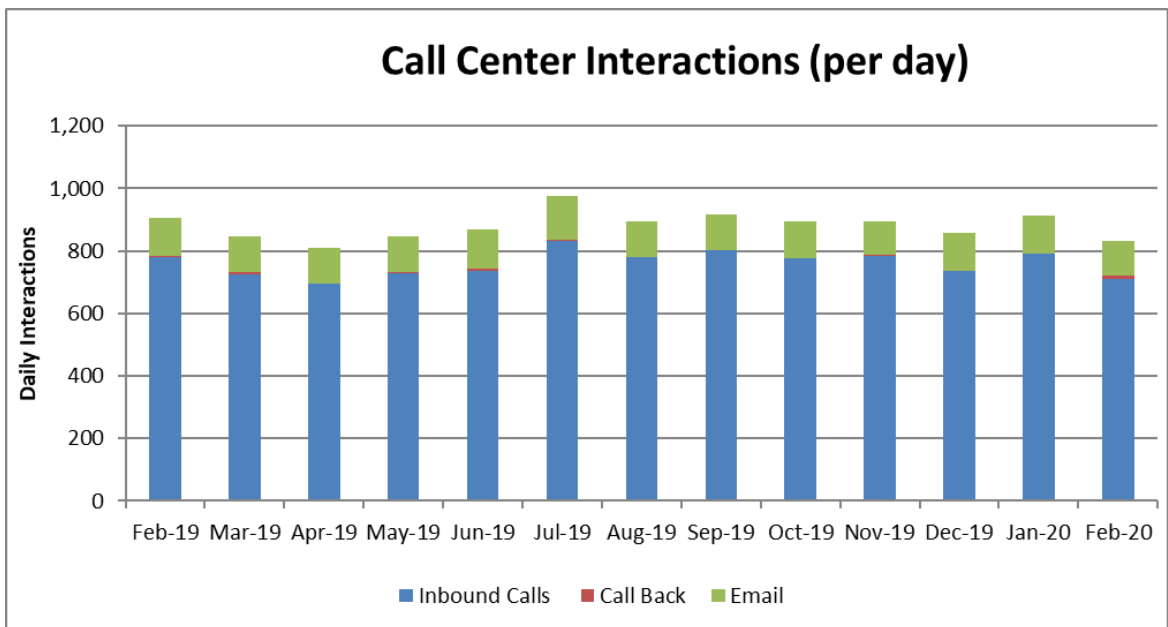


2. Customer Care Center Statistics



Jun-19 Billing Activity was affected by Virginia Beach tragedy.

Jul-19 A formatting change caused an increase in manual kickouts. We expect the levels to normalize in the next few months.



Customer Interaction Statistics	Sep	Oct	Nov	Dec	Jan	Feb
Calls Answered within 3 minutes	81%	86%	87%	83%	83%	86%
Average Wait Time (seconds)	0:81	0:71	0:65	0:83	0:78	0:68
Calls Abandoned	7%	7%	6%	7%	7%	6%

D. Procurement Statistics

ProCard Fraud	External Fraud Transactions *	Comments
July	2	Caught by Bank Immediately
August	0	
September	0	
October	1	Caught by Bank Immediately
November	0	
December	1	Employee caught during reconciliation
January	1	Caught by Bank Immediately
February	0	
Total	5	

***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	February 2020
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	2.27
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	15.29
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	101%
	General Reserves	Percentage of Operating Budget less Depreciation	118%
	Liquidity	Days Cash on Hand	501 Days
	Accounts Receivable (HRSD)	Dollars	\$28,362,129
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	18%

Respectfully,

Jay A. Bernas

Jay A. Bernas, P.E.

Director of Finance

TO: General Manager
FROM: Director of Information Technology
SUBJECT: Information Technology Department Report for February 2020
DATE: March 12, 2020

A. General

1. The HRSD website now includes customer self-service features for payment extension requests and submeter reading entries.
2. The enhanced interface between the E-Business Suite and the Primavera Unifier project management software is currently in user acceptance testing. Once in production, the interface will provide more streamlined processes involving invoice management, payment processing, and overall project visibility.
3. Staff participated in the implementation and training for the Orbit Analytics software, a set of reporting tools which extends reporting capabilities to cloud based applications, such as Primavera, used to manage and monitor major construction projects.
4. HRSD, and our Suffolk jurisdiction partners, participated in a week long Integration workshop with Oracle, to assess and determine the necessary business process requirements for the upcoming rollout of a new cloud-based mobile workforce solution.
5. Staff installed and configured a new server platform for the new version of the Fuel Master fleet fuel management application. The application will be installed, configured, and tested, prior to being brought online.

B. Strategic Planning Metrics Summary

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

3. Metrics Summary:

Item #	Strategic Planning Measure	Unit	February 2020
M-1.4a	Training During Work Hours Per Full-Time Employee (50) – Current Month	Total Training Hours / # FTE	0.91
M-1.4b	Total Training During Work Hours Per Full-Time Employee (50) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	30.6
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 February 2020
DATE: March 9, 2020

A. Interceptor Systems

1. North Shore (NS) Interceptor Systems

There were two Sanitary Sewer Overflows (SSOs) this month. One occurred at the Bayshore Pump Station (PS) as the result of saturated soil, elevated groundwater and significant periods of sustained rainfall. The second SSO resulted when a 20-inch force-main along Wythe Creek Road in Poquoson failed. Although staff was able to repair the line, they encountered several challenges including the need to remove 15-inches of asphalt, enduring over three-inches of rain during the repair effort, and working in a tight corridor. The failure was the result of internal corrosion near an unvented high spot in the line. A CCTV investigation revealed several hundred feet of pipe with severe internal corrosion condition. A valve was installed downstream of the failure and the upstream force main segment was deactivated. The two SSOs resulted in a total of 4,830 gallons of wastewater lost.

2. South Shore (SS) Interceptor Systems

On February 9, staff received a complaint about odors near the Laskin Road Pressure Reducing Station (PRS). Staff investigated and couldn't find odors near the PRS nor the nearby City of Virginia Beach PS.

B. Major Treatment Plant Operations

1. Army Base Treatment Plant (ABTP)

Staff continued to work with the Water Quality Department to identify the source of saltwater intrusion in the plant influent. Beginning February 21 there was a significant decrease in the influent conductivity, indicating that these efforts may have been successful. The incoming saltwater disrupted the effectiveness of the biological phosphorus removal system. Staff fed aluminum sulfate to control the effluent phosphorus during this upset.

2. Atlantic Treatment Plant (ATP)

- a. Installation of the new influent screen continues. Once completed, this screen will be the primary screen used to test the operation and performance before replacing the other three screens.
- b. The Combined Heat & Power (CHP) digester was shut down to make repairs on the gas piping after a hole was discovered. After the repairs were made the unit was brought back online.

3. Boat Harbor Treatment Plant (BHTP)

Elevated flows created settling issues due to reduced tank capacity as a result of the coatings work. Staff increased the detention time by bringing another secondary clarifier into service. Staff also added Polymer to help with settling and increased the waste rate.

4. Chesapeake-Elizabeth Treatment Plant (CETP)

- a. There were two odor complaints and 56 hydrogen sulfide (H₂S) wet scrubber exceptions this month mostly associated with the solids handling odor control system. Historically, the scrubber has not had a significant sulfide load and operated with non-potable water (NPW) alone. The multiple exceptions were the result of repeated efforts to resolve the issue without adding caustic. On February 13 staff started feeding caustic (sodium hydroxide) to the scrubber ending the exception condition.
- b. On February 2, the drain pump bubbler system and the Preliminary Treatment (PTF) Programmable Logic Controller (PLC) tripped. Approximately 100 gallons of NPW was discharged to the onsite holding pond and was not recovered before staff could reset the controller.
- c. A power anomaly caused the incinerator ID fan to trip which resulted in the use of the incinerator's bypass stack.

5. James River Treatment Plant (JRTP)

- a. There was one reportable wastewater event when approximately 20 gallons of foam escaped from the centrate transfer vault, mixed with rainwater and went down a storm drain. Staff raised the overflow pipe on the transfer vault and installed two sprayers to prevent foam from escaping in the future.

- b. Staff completed stress testing of the #5 Integrated Activated Solids (IFAS) Tank. The purpose of stress testing was to observe how the tank performed with a 65 percent fill fraction of IFAS media during high flows and evaluate ways for handling high flows with the higher fill fraction. Currently, the IFAS tanks are operating at a 45 percent fill fraction. Higher fill fractions provide more biological growth for nutrient removal. The stress test in conjunction with other operational changes demonstrated that the IFAS tanks at the 65 percent fill fraction can handle flows up to 60 million gallons per day (mgd).

6. Nansemond Treatment Plant (NTP)

- a. On February 1, a Sodium Hydroxide line ruptured causing a spill of approximately 2,500 gallons. Approximately 1,800 gallons were not recovered. Staff will replace the line and containment piping. Efforts underway to test and recover of any contaminated soil.
- b. On February 27, an NPW fire hydrant developed a leak at the Regional Residual Facility. Staff secured flow to the hydrant and repaired the leak. 150 gallons of NPW soaked into the ground and was not recovered.
- c. SWIFT Research Center (SWIFT RC)
 - 1. The total volume of SWIFT recharge into the Potomac aquifer for the month of January was 13.41 MG.
 - 2. SWIFT water tested positive for Total Coliform possibly resulting from solids accumulation in the chlorine contact pipe. Staff initiated an extensive two-week disinfection campaign of all associated equipment and piping using a stronger disinfectant. Results from this effort will dictate future preventive maintenance strategies.
 - 3. SWIFT RC team started the York River pilot work. The direct filtration skid is operational. Other than a few startup issues, testing is on schedule and going well.
 - 4. The permanent winterization/freeze protection of the Potomac Aquifer monitoring wells is complete. The effort included burying above ground piping from well heads to discharge pump station.

5. Recently the Recharge Well injectivity has declined. A plan to increase injectivity is in place and more discussion on this will follow once staff has sufficient data.

7. Virginia Initiative Plant (VIP)

On February 1st one of four raw water influent (RWI) pump motors failed at VIP. On February 7th a second one failed. These pumps are some of HRSD's most critical infrastructure. Flow into VIP must be pumped into the treatment plant from the gravity main and without the influent pumps raw sewage would back up into the neighborhood surrounding VIP.

Operating on two out of four pumps limits VIP's RWI pumping capacity below flows that occur during high rain events or high tides. Both motors appeared to fail under similar operating conditions. It is very uncommon to have two identical failures of this nature on new equipment. A detailed forensic analysis describing the root cause of the failures is currently being conducted. Staff treated the repair efforts as an emergency after determining that the risk of depending on two pumps (identical to the two that failed) was an unacceptable risk. The temporary solution required contractors to install a temporary pumping system that provided 30 MGD in RWI pumping capacity. The temporary pumping system is installed and functional. Although both motors were repaired and returned to VIP, they will remain out of service until the root cause analysis of the failure is complete.

8. Williamsburg Treatment Plant (WBTP)

There was one reportable wastewater, two incinerator air events, one odor event, two odor deviations and seven incinerator air deviations. The wastewater, one air and odor events occurred during the temporary loss of a transformer servicing the NPW building. During an infrared inspection of a transformer a small piece of copper flaked off the and landed across the busbar causing a short and an arc flash. Fortunately, there were no injuries or significant equipment damage. Due to loss of the effluent flow signal and main outfall valve controls staff used the short outfall. The incinerator bypass stack was activated due to loss of NPW to the incinerator. Loss of NPW also caused a loss of odor control systems. Power from the transformer was restored after ninety minutes. A second use of the incinerator bypass stack was caused by a power anomaly. Odor deviations were caused by higher than normal influent hydrogen sulfide.

9. York River Treatment Plant (YRTP)

There was a loss of utility power when a snake entered a meter base cabinet. Dominion Energy replaced the failed meter base cabinet.

10. Incinerator Operations Events Summary

There were no deviations from the required minimum operating parameters and seven minor (less than 60 minutes) non-reportable bypass events.

C. Small Communities (SC)

1. Middle Peninsula Small Communities Treatment and Collections - West Point System

Staff completed the pond pump installation and will complete the pond cleaning in the next couple of months.

2. Small Communities – Surry Systems

- a. Rainfall totaled at 5.79 inches over the month with 2.2 inches of rain falling on February 6 and 2.5 inches of rain falling on February 11. The excessive rainfall events on top of already saturated groundwater levels led to multiple overflows and cBOD permit exceedances this month.
- b. On February 7, Dendron PS 1B overflowed 1,570 gallons due to heavy rain. Staff from the Sussex Service Authority (SSA) verified the station was running properly. After the event, SSA removed debris and limed the area.
- c. On February 11 Dendron PS 1B overflowed 2,785 gallons due to heavy rain. SSA verified the station was running properly. After the event, SSA removed debris and limed the area.
- d. On February 12, an overflow was identified at Dendron PS 2A by SSA. The station lost power on January 31 and ran on generator power until it ran out of fuel on February 6. The station then overflowed from 3:53PM on February 6 until 12:45PM on February 12th when SSA noticed the overflow during a weekly check. The total overflow amount is estimated at 90,756 gallons. SSA refueled the generator and restored power to the station to stop the overflow. Dominion Power was contacted about the power outage and utility power was restored that afternoon. This event exposed

vulnerabilities with the alarming system, alarm response, and ongoing preventative maintenance actions. Subsequently, these issues were fully vetted and corrected by staff and SSA.

D. Electrical & Instrumentation (E&I)

A Dominion Energy (DE) cable faulted at the NS Operations Complex on February 6. DE located the cable fault under the parking lot asphalt near the second gate entrance. DE ran a temporary cable to restore power. On February 7 DE saw cut the parking lot to repair the damaged cable.

E. Water Technology and Research

A project is just starting to evaluate direct filtration, compared to conventional coagulation/flocculation/sedimentation/ozonation/filtration, as part of the SWIFT upgrade at the YRTP. This is possible because YRTP currently has deep-bed denitrification filters in service, and this filtered effluent is already much low turbidity compared to secondary effluent. Direct filtration involves coagulation at limited dose, flocculation, ozonation, and filtration, thus omitting the sedimentation step. The estimated capital cost savings are \$10-15M for the York River SWIFT upgrade, and there would also be considerable chemical savings and less solids produced. The question is filter performance in terms of run time between backwashes (unit filter run volume), effluent turbidity, and removal of total organic carbon. Pilot testing is being initiated now at the SWIFT Research Center with parallel setups that will consider this alternative.

F. MOM reporting numbers

MOM Reporting #	Measure Name	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2.7	# of PS Annual PMs Performed (NS)	1	4	8	4	2	3	5	2				
2.7	# of PS Annual PMs Performed (SS)	6	5	4	5	4	5	5	4				
2.7	# of Backup Generator PMs Performed (Target is 4.6)	10	13	17	11	9	9	9	14				
2.8	# of FM Air Release Valve PMs Performed (NS)	209	77	70	127	139	111	157	168				
2.8	# of FM Air Release Valve PMs Performed (SS)	311	318	365	334	97	247	300	199				
2.9	# of Linear Feet of Gravity Clean (NS) (Target is 2,417 for HRSD)	6,248	2,681	1,426	638	2,079	3,454	7,161	4,149				
2.9	# of Linear Feet of Gravity Clean (SS) (Target is 2,417 for HRSD)	1,064	13,240	1,551	1,365	4,365	3,454	3,415	3,714				
2.9	# of Linear Feet of Gravity CCTV Inspection (HRSD Target 3,300 LF)	610	0	0	0	0	0	0	0				

G. Strategic Measurement Data

1. Education and Outreach Events:

- a. 02/11/2020: SS Interceptor staff met with City of Chesapeake Public Utilities Operations staff to collaborate and discuss locality issues – quarterly meeting.
- b. 02/19/2020: SS Interceptor staff met with City of Norfolk Utilities Operations staff to collaborate and discuss locality issues – quarterly meeting.
- c. 02/26/2020: Eric Horton from E&I volunteered at Cradock Middle School in Portsmouth for the first annual career day
- d. 02/27/2020: SS Interceptor staff met with City of Suffolk Public Utilities Operations staff to collaborate and discuss locality issues – quarterly meeting.

2. Community Partners:

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

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	February 2020
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (516) – Current Month	Hours / FTE	3.23
M-1.4b	Total Training During Work Hours per FTE (516) – Cumulative Year-to-Date	Hours / FTE	24.66
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	29,498.50
M-2.3b	Planned Maintenance – Preventive and Condition Based	% of Total Maintenance Hours	59.85%

Item #	Strategic Planning Measure	Unit	February 2020
M-2.3c	Planned Maintenance - Corrective Maintenance	% of Total Maintenance Hours	18.8%
M-2.3d	Planned Maintenance - Projects	% of Total Maintenance Hours	21.35%
M- 4.1a	Energy Use: Treatment *reported for January 2020	kWh/MG	2,681
M-4.1b	Energy Use: Pump Stations *reported for January 2020	kWh/MG	188
M-4.1c	Energy Use: Office Building *reported for January 2020	kWh/MG	99
M-5.2	Educational and Outreach Events	Number	4
M-5.3	Number of Community Partners	Number	2

Respectfully submitted,
Steve de Mik
 Director of Operations

TO: General Manager

FROM: Director of Talent Management (TM)

SUBJECT: Monthly Report for February 2020

DATE: March 11, 2020

A. Talent Management Executive Summary

1. Recruitment

New Recruitment Campaigns	10
Job Offers Accepted – Internal Selections	5
Job Offers Accepted – External Selections	8
Average Days to Fill Position	87*

*Note: Average days to fill without two hard to fill positions is 45 days

2. Wellness Program Participation

Participation Activities	Unit	February 2020	Year to Date (March 2019–February 2020)
Biometric Screenings	Number	378	563
Preventive Health Exams	Number	258	445
Preventive Health Assessments	Number	255	655
Online Health Improvement Programs	Number	299	966
Online Health Tracking	Number	490	1916
Challenges	Number	0	139
Fit-Bit Promotion	Number	5	94

3. The Wellness Specialist continued to work on year end activities for Wellness Year 7. Initial results indicate a continued increase in participation.
4. The Human Resources (HR) Business Analyst and Safety staff developed a work process to use the Enterprise Resource Planning (ERP) Learning Management to track and document safety training based on internal audit recommendations. The plan was presented to the Operations Quality Steering Team (QST) and will be piloted by Treatment.

5. HR staff continued working with the Benefits consultant and Finance to finalize plan renewals for Fiscal Year 2021.
6. HR provided information for the Chesapeake Bay Bridge Tunnel Commission and James City County Service Authority compensation surveys.
7. HR Policies and Procedures and ERP Manager self-service training was provided to several new supervisors.
8. HR, Accounting, and IT staff compiled and completed employee 1095-C forms summarizing health insurance coverage required by the Affordable Care Act.
9. Two new employees presented Your Role in Quality Projects (YRIQ) to the QST. YRIQ students are asked to develop an improvement to their daily work and each class selects projects for presentation. YRIQ projects provide an opportunity to elevate new and innovative perspectives for improving everyday jobs. Ryan Everton, Pretreatment and Pollution Prevention (P3) Supervising Specialist presented *A Telescoping Pole for Meter Readings* and Andre Jones, Maintenance Operator Assistant, presented a *Bar Screen Conveyor Brush*.
10. Quality Facilitators conducted Teams and Problem Solving and YRIQ classes.
11. Safety staff compiled and submitted Superfund Amendments and Reauthorization Act Title III, Tier I and II reports to the Department of Environmental Quality and localities for all facilities by the March 1 deadline.
12. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2019</u>	<u>2020</u>
Mishaps	37	6
Lost Time Mishaps	6	0
<i>Numbers subject to change pending HR review of each case.</i>		

13. Safety Division Monthly Activities

Safety Training Classes	15
Work Center Safety Inspections	6
Reported Accident Investigations	2
Construction Site Safety Evaluations	30
Contractor Safety Briefings	7
Hot Work Permits Issued	23
Confined Space Permits Issued/Reviewed	50
Industrial Hygiene Monitoring Events	3

B. Monthly Strategic Planning Metrics Summary

1. Education and Outreach Events: (11)

- a. 02/03/20 – Phoebus High School Career Fair
- b. 02/04/20 – *Get Hired Hampton* Career Event
- c. 02/05/20 – Green Run High School Career Night
- d. 02/05/20 – Granby High School Career and Technical Education Fair
- e. 02/05/20 – Christopher Newport University Spring Career Fair
- f. 02/11/20 – City of Norfolk Technical Education Center Career and College Fair
- g. 02/13/20 - City of Virginia Beach Public Schools Career Fair
- h. 02/22/20 – *Time Out 4U* Science Technology Engineering & Math Symposium
- i. 02/22/20 – City of Virginia Beach Public Schools Partnership Expo
- j. 02/26/20 – Craddock Middle School Career Fair
- k. 02/27/20 – Virginia Wesleyan University Career Fair

2. Community Partners: (7)

- a. City of Hampton Public Schools

- b. City of Virginia Beach Public Schools
- c. City of Norfolk Public Schools
- d. Christopher Newport University
- e. Time Out 4U
- f. City of Portsmouth Public Schools
- g. Virginia Wesleyan University

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	February 2020
M-1.1a	Employee Turnover Rate (Total)	Percentage	0.63%
M-1.1b	Employee Turnover - Service Retirements	Percentage	0.25%
M-1.4a	Total Training Hours Per Full Time Employee (17) – February	Total Training Hours/ FTE	1.08
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	37.08
M-5.2	Educational and Outreach Events	Number	10
M-5.3	Community Partners	Number	8

Respectfully submitted,
Paula A. Hogg
 Director of Talent Management

TO: General Manager
FROM: Director of Water Quality (WQ)
SUBJECT: Monthly Report for February 2020
DATE: March 12, 2020

A. General

1. Pretreatment and Pollution Prevention (P3) division staff assessed two civil penalties this month.

UniFirst Corporation - Norfolk

An Enforcement Order was issued to UniFirst Corporation in January 2020 for a series of late submittals and technical violations associated with the facility's #1 sample point. The Order contained an invoice for a \$2,000 Civil Penalty. The permittee submitted the Certified April 2019 and Certified September 2019 calendar month reports late. In addition to the late submittals, the permittee exceeded the daily maximum limit and the monthly average limit for Oil & Grease (SGT-HEM) and the daily maximum limit for Xylenes, and Tetrachloroethene during the month of October 2019.

The permittee stated the late submittals were due to administrative oversight and the technical violations were associated with heavily soiled loads being processed at the same time; therefore, not allowing for appropriate equalization and treatment of the wastewater. UniFirst stated they are going to perform wash floor loading refresher training to help ensure the wash loads are balanced between lightly soiled and heavily soiled loads. The permittee is also working with a third-party wastewater service provider to conduct wastewater operator refresher training.

A Show Cause meeting was held to discuss the above measures to prevent recurrence and the associated penalty. The Enforcement Order was accepted, and the Civil Penalty was paid in February 2020.

Kraft Heinz Food Company- Suffolk

An Enforcement Order was issued to The Kraft Heinz Foods Company in January 2020 for an administrative violation and several technical violations associated with the facility's pretreatment (PRET) sample point. The Order contained an invoice for a \$4,000 Civil Penalty.

The permittee submitted the response to a Notice of Deficiency after the due date, exceeded the daily maximum limit and the monthly average limit for Oil & Grease (SGT-HEM) and the daily maximum limit for COD:BOD during the month of March 2019, discharged solids or viscous substances that caused an obstruction to flow and were detrimental to sewerage system operations, and failed to maintain a sample point sufficient to obtain representative sampling.

A Show Cause meeting was held to discuss measures to prevent recurrence and the associated penalty. As a result of the meeting, the permittee contacted their pretreatment equipment vendor to evaluate the current pretreatment system and operations and modify as necessary to prevent further operational violations. The Enforcement Order was accepted, and the Civil Penalty was paid in January 2020.

2. The Director attended the National Association of Wastewater Agencies (NACWA) annual winter meeting in Atlanta, Georgia and chaired the Water Quality Committee meeting. The conference held a discussion specific to the sampling and analysis for the emerging contaminants known as poly and perfluoroalkyl substances (PFAS). One particular wastewater discharger reported they were spending over \$400,000 per year for PFAS-related analyses without water quality standards in place. Some attendees questioned whether they should monitor for compounds where risk of unacceptable exposure is questionable. HRSD's position is to use the best science available to meet the needs of ratepayers and the environment. For example, the Commission approved a staff request last month to study PFAS compounds in biosolids due to concerns that these chemicals may leach from biosolids that are land applied. HRSD will be better able to address ratepayer concerns with more data.
3. The Director provided the General Manager with comments regarding the Commonwealth's proposal to change regulations based on its watershed implementation plan to meet Chesapeake Bay Total Maximum Daily Load (TMDL) nutrient targets. These comments and the HRSD proposal were provided to the Department of Environmental Quality (DEQ) for their review and consideration. The Commonwealth's proposal was biased in placing much of the state's burden on HRSD for waters not served by HRSD. Further, the state did not quantitatively evaluate its approach or any other approach to determine that it met the Governor's Executive Orders requiring that such activities minimize fiscal impact, provide multiple benefits and offer cost effectiveness. Finally, the regulation changes proposed do not account for the time required for SWIFT to be implemented and for SWIFT's benefits to be realized (lower nutrient loads

to surface waters). HRSD is now waiting for a response from DEQ based on the input provided by HRSD and other stakeholders.

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group reported the following activities for the month of February:
 - a. Ash/Biosolids Recycling: The team is looking to make bricks out of HRSD ash and add to the landscaping at the Atlantic Treatment facility.
 - b. Communications: February's Sustainable Spotlight showcased the growing trend to avoid using single-use products during HRSD group meals, announced the 50th Anniversary of Earth Day Celebration at HRSD and provided tips on the next steps to reduce waste.
 - c. Earth Day: The team finalized Earth Week celebration plans and started advertising. Events include a clean-up at Fort Monroe on Saturday, making our workspaces greener using plants in offices, and a tree planting event. The team continues to work with Fort Monroe on installing an oyster reef.
 - d. Resilient Landscaping: The team hosted a lunch and learn on February 5 on Resilient/Sustainable Landscaping by Dr. Laurie Fox, a Virginia Tech horticulture specialist.
 - e. Sustainable Purchasing: The team is developing a SharePoint site that lists all approved vendors HRSD can use to purchase sustainable products.
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 Northumberland County and Westmoreland County to support monitoring required for their respective Virginia Pollution Discharge Elimination System (VPDES) permits and to the City of Roanoke and King George County to support water quality monitoring in their service areas.

D. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Community Partners: 8
 - a. City of Chesapeake
 - b. City of Hampton
 - c. City of Newport News
 - d. City of Suffolk
 - e. City of Virginia Beach
 - f. Hampton Roads Planning District Commission Fats, Oils, and Grease
 - g. United Way
 - h. Virginia Department of Health Division of Shellfish Sanitation
3. Odor Complaints: 2
 - a. The Technical Services Division (TSD) was contacted on February 3 by James Tibbs regarding sewer odors at his business Tibbs Auto in King William. The Small Communities Division (SCD) and the TSD had already responded and replaced the carbon media in the manhole odor control inserts the week prior. The seals on the manhole inserts were inspected and deemed in good working order. OdaLog H₂S meters were installed to monitor the levels of sulfide in the manholes behind Tibbs Auto. Monitoring data identified high levels of sulfide (150-350 parts per million) in the manholes. This is presenting a challenge to the carbon media and may periodically overwhelm the carbon. SCD is cleaning and inspecting the system in an effort to reduce sulfides. Sulfide monitoring in the manholes will continue and carbon media replacement is expected every three months at current sulfide levels.
 - b. South Shore Operations (SS Ops) received an odor complaint on February 10 for a gas odor at/near Laskin Road in Virginia Beach. SS Ops investigated city and HRSD pump stations and did not find the odor. HDR indicated that this odor most likely originated with utility work that includes some sanitary sewer work associated with the Virginia Department of Transportation project under construction near the intersection of Laskin Road and Fremac Drive. No further complaints have been received.

4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	February 2020
M-1.4a	Training During Work Hours Per Full Time Employee (114) (Current Month)	Total Hours / # FTE	4.43
M-1.4b	Total Training During Work Hours Per Full Time Employee (114) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	40.11
M-2.5	North Shore/South Shore Capacity Related Overflows	# within Level of Service	1
M-3.1	Permit Compliance	# of Exceedances: # of Permitted Parameters	8:40,586
M-3.2	Odor Complaints	#	2
M-3.4	Pollutant Removal	Total Pounds Removed	125,655,254
M-3.5	Pollutant Discharge	% Pounds Discharged/ Pounds Permitted	19%
M-5.2	Educational and Outreach Events	#	0
M-5.3	Community Partners	#	8
	Average Daily Flow	Total MGD for all Treatment Plants	173.19
	Pretreatment Related System Issues	#	0

Respectfully submitted,

James Pletch, Ph.D

Director of Water Quality



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

I. Projects in Process

Payroll/ Timekeeping

- **Tasks Completed (February 2020)**
 - Completed fieldwork procedures
 - Issued draft internal audit report for Management response
- **Upcoming Tasks (March 2020)**
 - Finalize internal audit report

Pollution Source Control

- **Tasks Completed (February 2020)**
 - Finalized planning documentation
 - Prepared fieldwork audit objectives
 - Issued fieldwork document request list
- **Upcoming Tasks (March 2020)**
 - Conduct fieldwork testing procedures
 - Begin drafting internal audit report

SWIFT Program

- **Tasks Completed (February 2020)**
 - Held Planning Meeting
 - Requested Program Management Plan and Contract
- **Upcoming Tasks (March 2020)**
 - Receive and Review documentation
 - Finalize Scope
 - Conduct Entrance Meeting

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.

II. Upcoming Projects (FY2020)

SC&H's next audit will pertain to the Fleet Management at HRSD and is scheduled to begin in Q2 (April) of calendar year 2020.

III. 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	5/11/2016	In process	11	2	13
Biosolids Recycling	10/8/2016	Pending Permit	7	1	8
HR Benefits	11/22/2016	Closed	15	0	15
Inventory	4/20/2017	In process	1	4	5
Procurement/ ProCard	8/23/2017	In process	8	3	11
Engineering Procurement	4/20/2018	In process	4	4	8
Corporate Governance: Ethics Function	3/21/18	June 2020	3	2	5
Treatment Plant Operations	10/15/18	In process	0	9	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
Totals			49	34	83

*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.

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
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%
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%
M-1.2	Internal Employee Promotion Eligible	Percentage	100%		59%	80%	69.57%	71.43%	64.00%	69.00%	68.00%	85.00%	85.00%
M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76	51	56	67	67	66
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
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
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
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
M-2.1	CIP Delivery - Budget	Percentage			113%	96%	124%	149%	160%	151%	156%	160%	170%
M-2.2	CIP Delivery - Schedule	Percentage			169%	169%	161%	150%	190%	172%	173%	167%	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
M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	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%
M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg			18%	22%	20%	18%	32%	34%	32%	32%	27%
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%	6%	6%	4%	7%	7%	5%	5%	4
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
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
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
M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg			197	173	152	159	168	163	173	170	181
M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96	104	97	104	104	95
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%
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
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%
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
M-5.1	Name Recognition	Percentage (Survey Result)	100%	67%	71%	N/A	62%	N/A	60%	N/A	N/A	53%	N/A
M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%
M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26
	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
	Rainfall	Annual Total Inches		66.9	44.21	56.21	46.65	46.52	51.95	54.14	66.66	49.24	53.1
	Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	73%	73%	76%	72%
	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%
	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%

Monthly Updated Metrics														FY-20	FY-20
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	Jan-20	Feb-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	146.5	173.2
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	0	0
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	103%	101%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	116%	18%
	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	\$30,155,220	\$28,362,129
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	17%	18%
M-2.5	Capacity Related Overflows	Number within Level of Service	0		25	1	30	5	11	16	6	10	5	0	1
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	5:35513	8:40586
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	2	2
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	110,649,092	125,655,254
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	19%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	16	23
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	17	22

EFFLUENT SUMMARY FOR FEBRUARY 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	12.43	69%	4	4.9	1	2	0.70	0.78	4.5	4.7	NA	NA	11
ATLANTIC	26.09	48%	17	6.7	2	1	NA	NA	NA	NA	NA	NA	9
BOAT HARBOR	20.61	82%	5	9.7	1	1	0.54	0.56	17	19	NA	NA	4
CENT. MIDDLESEX	0.010	40%	<2	<1.0	<1	<1	NA	NA	NA	NA	NA	NA	NA
CHES-ELIZ	21.07	88%	21	26	28	10	1.7	1.4	32	32	NA	NA	19
JAMES RIVER	16.60	83%	7	9.9	3	1	0.92	0.63	10	9.4	NA	NA	1
KING WILLIAM	0.057	57%	<2	<1.0	NA	<1	0.025	0.031	2.2	2.3	2.2	NA	NA
NANSEMOND	18.07	60%	6	4.6	3	9	0.51	0.58	4.2	4.3	NA	NA	10
SURRY, COUNTY	0.089	137%	6	7.0	NA	NA	NA	NA	NA	NA	NA	NA	0
SURRY, TOWN	0.086	143%	9	17	NA	17	NA	NA	NA	NA	1.7	0.28	NA
URBANNA	0.036	36%	3	6.5	2	2	3.2	3.4	10	10	NA	0.10	NA
VIP	32.18	80%	6	7.4	2	2	0.33	0.27	3.1	3.0	NA	NA	3
WEST POINT	0.591	99%	21	20	1	1	2.0	2.1	14	16	NA	NA	0
WILLIAMSBURG	8.46	38%	4	2.4	2	2	0.53	0.50	4.4	4.1	NA	NA	3
YORK RIVER	16.83	112%	3	0.79	1	1	0.40	0.33	5.2	4.9	NA	NA	0
	173.19												

Tributary Summary

	% of Capacity
North Shore	76%
South Shore	66%
Small Communities	87%

Tributaries	Annual Total Nitrogen			Annual Total Phosphorus		
	Discharged	Operational		Discharged	Operational	
	YTD	Projection CY20		YTD	Projection CY20	
	%	Lbs	%	%	Lbs	%
James River	15%	4,111,272	90%	13%	272,924	86%
York River	14%	259,271	90%	16%	16,574	86%
Rappahannock	15%	NA	NA	68%	NA	NA

Rainfall (inch)

North Shore (PHF)	South Shore (ORF)	Small Communities (FYJ)
-------------------------	-------------------------	-------------------------------

Permit Exceedances: Total Possible Exceedances, FY20 to Date: 8:40,586
Pounds of Pollutants Removed in FY20 to Date: 125,655,254
Pollutant Lbs Discharged/Permitted Discharge FY20 to Date: 19%

Month	5.12"	4.48"	4.50"
Normal for Month	2.89"	2.80"	2.71"
Year to Date Total	8.49"	8.06"	7.45"
Normal for YTD	6.25"	5.87"	6.11"

AIR EMISSIONS SUMMARY FOR FEBRUARY 2020

	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	Temp 12 hr ave (F)	Venturi(s) PD 12 hr ave (in. WC)	Precooler Flow 12 hr ave (GPM)	Spray Flow 12 hr ave (GPM)	Venturi Flow 12 hr ave (GPM)	Tray/PBs Flow 12 hr ave (GPM)	Scrubber pH 3 hr ave	Any Bypass Stack Use	THC Mo. Ave (PPM)	THC DC (%)	BZ Temp Daily Ave Days >Max
MHI PLANT											
ARMY BASE	0	0	0	0	0	0	0	1	33	99	0
BOAT HARBOR	0	0	0	n/a	0	0	0	4	17	98	0
CHES-ELIZ	0	0	0	0	0	0	0	1	25	99	0
VIP	0	0	0	n/a	0	0	0	0	60	99	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	2	15	95	0

ALL OPERATIONS

DEQ Reportable Air Incidents:	1
DEQ Request for Corrective Action:	0
DEQ Warning Letter:	0
DEQ Notice of Violation:	0
Other Air Permit Deviations:	0
Odor Complaints Received:	2
HRSD Odor Scrubber H2S Exceptions:	56

AGENDA ITEM 12.e. – March 24, 2020

Subject: Virginia Initiative Plant (VIP) Influent Motors Repair
Emergency Declaration

Recommended Action: No action is required. Information Only.

CIP Project: VP018700

Brief: On February 1st one of four raw water influent (RWI) pump motors failed at VIP failed. On February 7th a second one failed. These pumps are some of HRSD's most critical infrastructure. Flow into VIP must be pumped into the treatment plant from the gravity main and without the influent pumps raw sewage would back up into the neighborhood surrounding VIP. Operating on two out of four pumps limits VIP's RWI pumping capacity below flows that occur during high rain events or high tides..

Both motors appeared to fail under similar operating conditions. A detailed forensic analysis describing the root cause of the failures is currently being conducted. Staff treated the repair efforts as an emergency and considered the risk of depending on two pumps as unacceptable. Efforts to correct the problem required staff to utilize the services of the contractor Bridgeman Civil, Inc., to install a temporary pumping system that provided 30 million gallons per day (MGD) in RWI pumping capacity. The temporary pumping system is installed and functional. We also utilized engineering services and a contractor to repair the motors.

Both motors have been repaired and returned to VIP.

The estimated cost of this work is \$1,100,000.

HRSD COMMISSION MEETING MINUTES
March 24, 2020

ATTACHMENT #6

AGENDA ITEM 12. FISCAL YEAR-2021 ANNUAL BUDGET AND INTERNAL AUDIT

- [Presentation](#)
- [FY-2021 to FY-2040 Financial Forecast](#)
- [Operating Budget](#)
- [Capital Budget](#)
- [Summary of Capital Improvement Program](#)
- [Rate Schedule](#)



FY2021 Budget
March 24, 2020

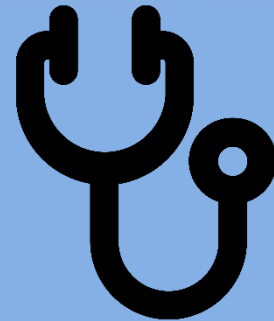
Bottom-Line Up Front (BLUF)



Opex Up 6.1%



+12 FTEs



✂️ \$11.6M



No Change

Or



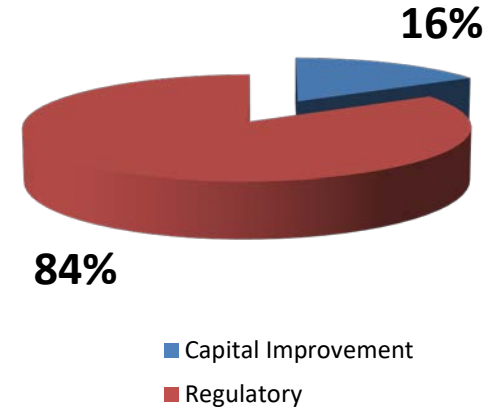
↑\$0.10/day

HRSD



Proposed Rate Increase or No Rate Increase

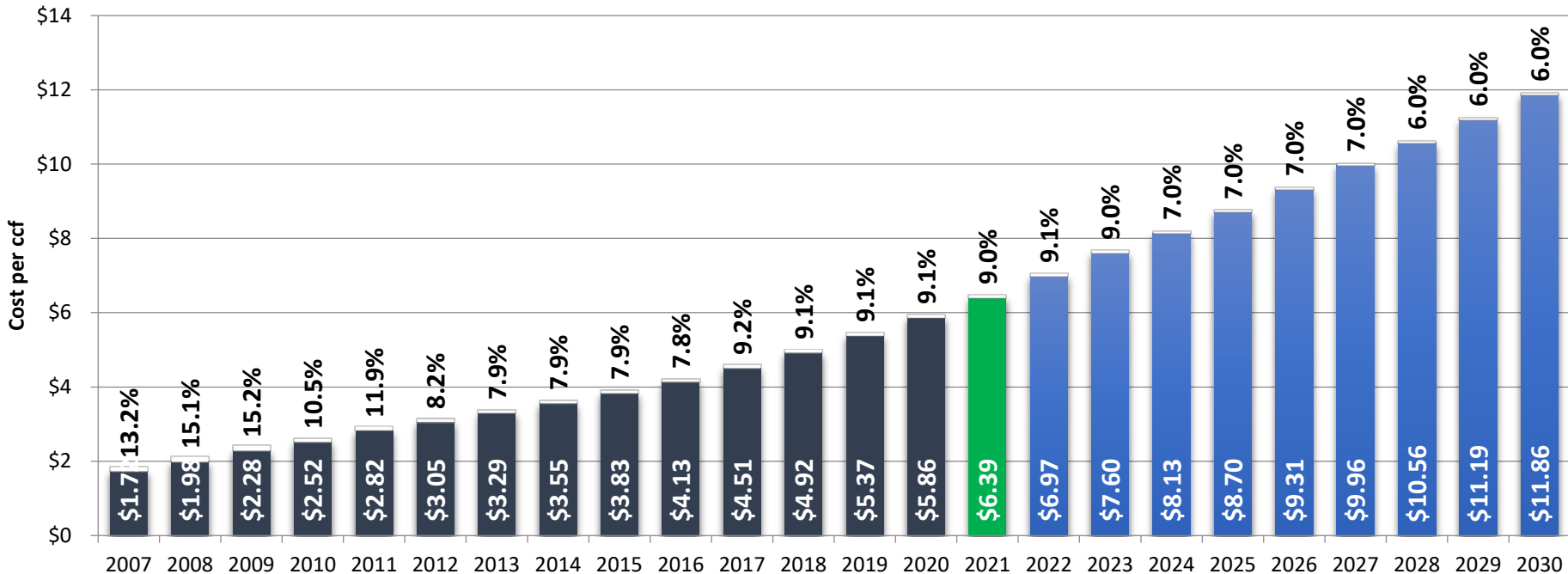
- FY21 – 9.0% rate increase
 - \$6.39 per ccf (up from \$5.86 per ccf)
 - Proposed Avg monthly bill = \$35.78
 - Current monthly bill = \$32.82
 - Up \$2.96 per month from last fiscal year
 - **About \$0.10 per day**
 - **0.7% of Median Household Income**



- **Primarily driven by CIP – 84% Regulatory Required**

Historical and Projected Rate Increases

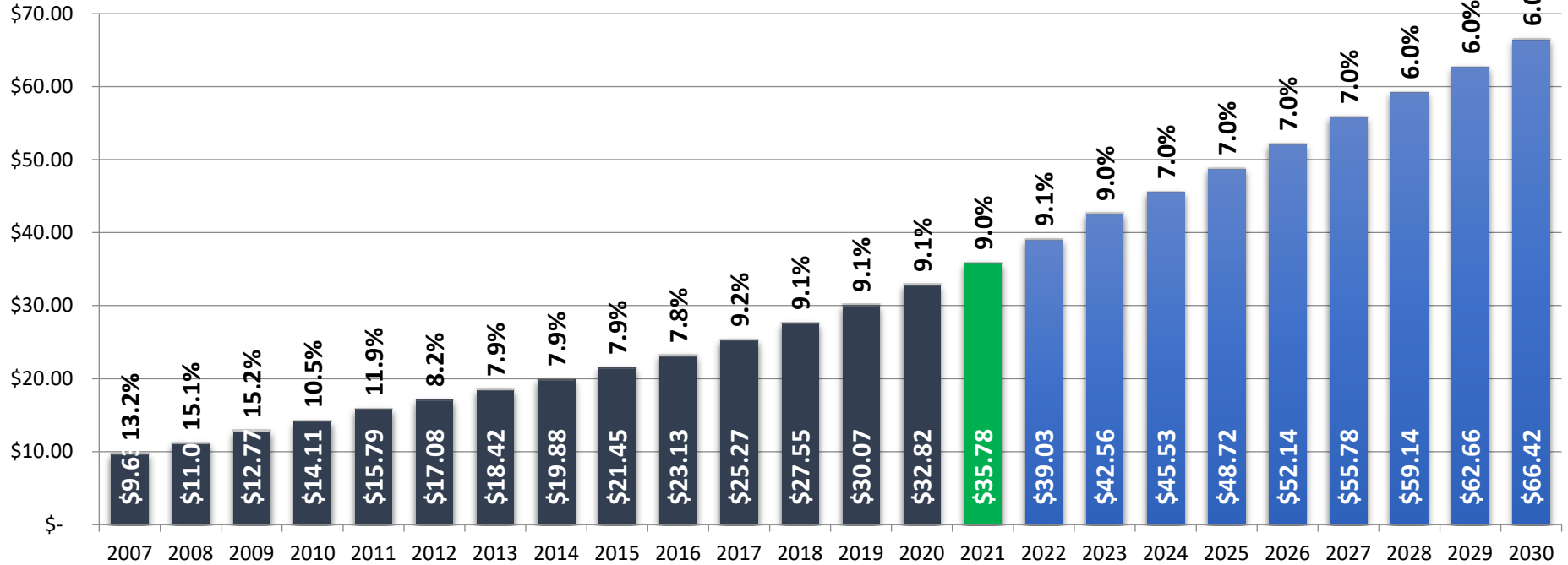
Historical and Projected Wastewater Rate



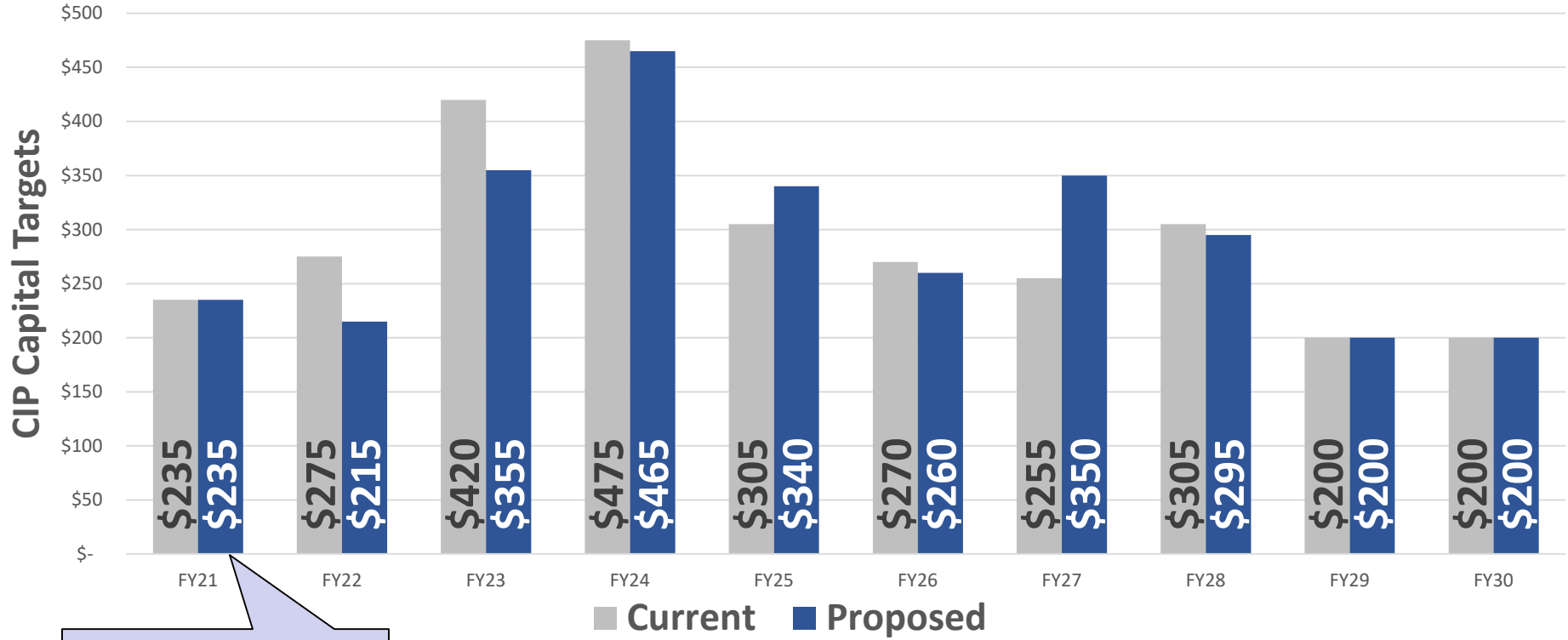


FY21 - \$1.18 per day for clean water

Historical and Projected Monthly Wastewater Treatment Bill @ 5.6 ccf



Capital Improvement Program – Target Changes



\$42M Carry-over

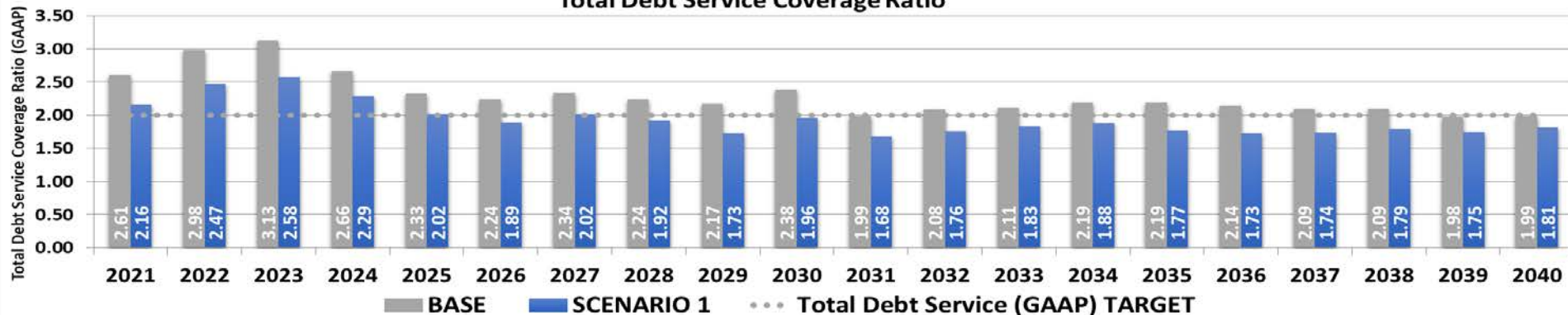


FY21 Budget Summary Differential

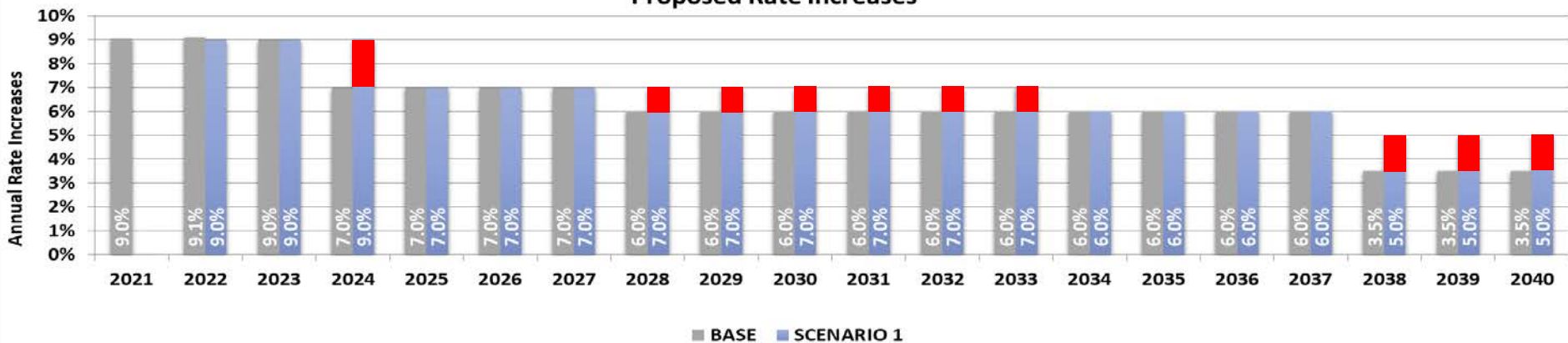
	Increase	No Increase	Differential
Revenue	\$ 360,075	\$ 332,397	\$ (27,678)
Expenses	\$(175,776)	\$(175,776)	-
Debt Service	\$ (61,408)	\$(61,408)	-
Cash for CIP	\$(122,891)	\$(94,953)	27,938

Proposed No Rate Increase – Financial Forecast Impacts

Total Debt Service Coverage Ratio



Proposed Rate Increases



Small Communities Rate Change – Capital Recovery

- Eliminates capital recovery fee in Urbanna
 - FY20 Rate = \$15.48/k-gals
 - **Proposed FY21 Rate = \$13.43/k-gals** (13.2% reduction)
- Partial reduction in West Point
 - FY20 Rate = \$15.71/k-gals
 - **Proposed FY21 Rate = \$13.62/k-gals** (13.3% reduction)
 - Remaining West Point expires in at the end of FY21
- King William expires at the end of FY27

- \$0.30 per day applicable across HRSD
 - Only if it is metered flow
 - Small Communities was based on 3,000 gals/month minimum
- Minimum Charge based on Operations Dept labor divided by ten-year rolling average divided by 365
 - 24/7 Operation to protect public health and the environment

Expenses

Where are we budgeting our money?



Infrastructure=\$0.51



People=\$0.24



OpEx=\$0.25

Operating Expenses Summary

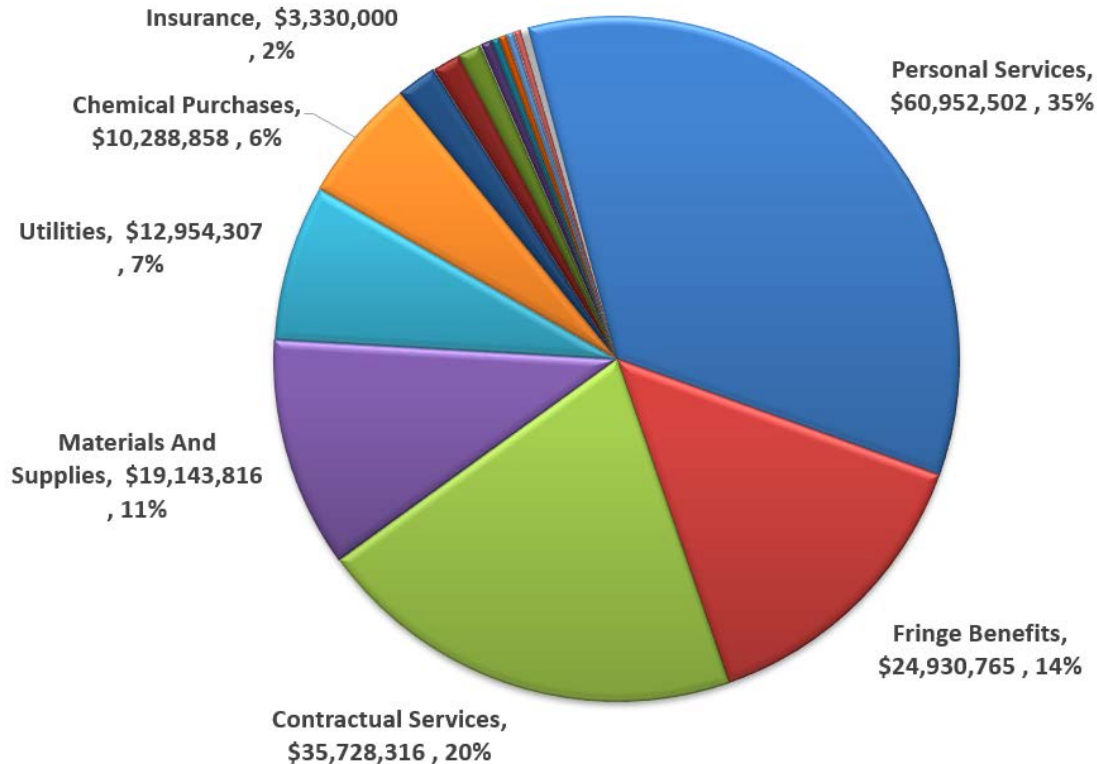
Summary of Expenses Grouped by Object Code

OBJECT CODE Column1	FY19	FY20	FY20	FY21	FY21 Proposed vs FY21 Proposed vs	
	Actuals Year Total	Actuals Ending 12/31	Budget Year Total	Proposed Year Total	Budget \$ Dif	Budget % Dif from Budget
	Column2	Column3	Column4	Column6	Column7	Column8
AC_51000:Personal Services	\$ 56,335,930	\$ 29,269,389	\$ 57,346,224	\$ 60,952,502	\$ 3,606,279	6.3%
AC_52000:Fringe Benefits	\$ 18,235,351	\$ 12,164,699	\$ 24,216,574	\$ 24,930,765	\$ 714,191	2.9%
AC_53000:Materials And Supplies	\$ 16,616,556	\$ 6,488,544	\$ 17,550,000	\$ 19,143,816	\$ 1,593,816	9.1%
AC_53500:Transportation	\$ 853,677	\$ 365,249	\$ 867,526	\$ 931,191	\$ 63,665	7.3%
AC_53600:Transportation Fuels	\$ 569,111	\$ 240,447	\$ 711,280	\$ 646,820	\$ (64,460)	-9.1%
AC_54000:Utilities	\$ 12,748,905	\$ 5,807,944	\$ 12,725,560	\$ 12,954,307	\$ 228,747	1.8%
AC_54500:Chemical Purchases	\$ 8,746,299	\$ 4,483,146	\$ 10,714,718	\$ 10,288,858	\$ (425,860)	-4.0%
AC_55000:Contractual Services	\$ 26,715,459	\$ 12,053,671	\$ 32,142,428	\$ 35,728,316	\$ 3,585,888	11.2%
AC_55500:Consulting Services	\$ 1,912,641	\$ 947,920	\$ 1,908,800	\$ 1,968,000	\$ 59,200	3.1%
AC_56000:Miscellaneous Expenses	\$ 2,203,049	\$ 1,207,731	\$ 2,127,464	\$ 2,375,887	\$ 248,423	11.7%
AC_56500:Recruitment Expenses	\$ 375,449	\$ 151,504	\$ 402,700	\$ 374,500	\$ (28,200)	-7.0%
AC_57000:Bond Issuance	\$ 52,667	\$ 1,084,458	\$ 350,000	\$ 696,000	\$ 346,000	98.9%
AC_57500:Apprentice Program	\$ 205,053	\$ 80,788	\$ 245,246	\$ 273,900	\$ 28,654	11.7%
AC_58000:Insurance	\$ 2,839,819	\$ 2,447,931	\$ 3,470,000	\$ 3,330,000	\$ (140,000)	-4.0%
AC_58500:District Memberships	\$ 492,899	\$ 478,519	\$ 578,699	\$ 581,203	\$ 2,504	0.4%
AC_60000:Capital Assets	\$ 683,019	\$ 91,825	\$ 301,600	\$ 600,000	\$ 298,400	98.9%
Total Operating Expenses	\$ 149,585,882	\$ 77,363,767	\$ 165,658,819	\$ 175,776,066	\$ 10,117,247	6.11%

- Up 6.1% YOY
- Higher than FY20 Forecast

Operating Expenses, 49% = People

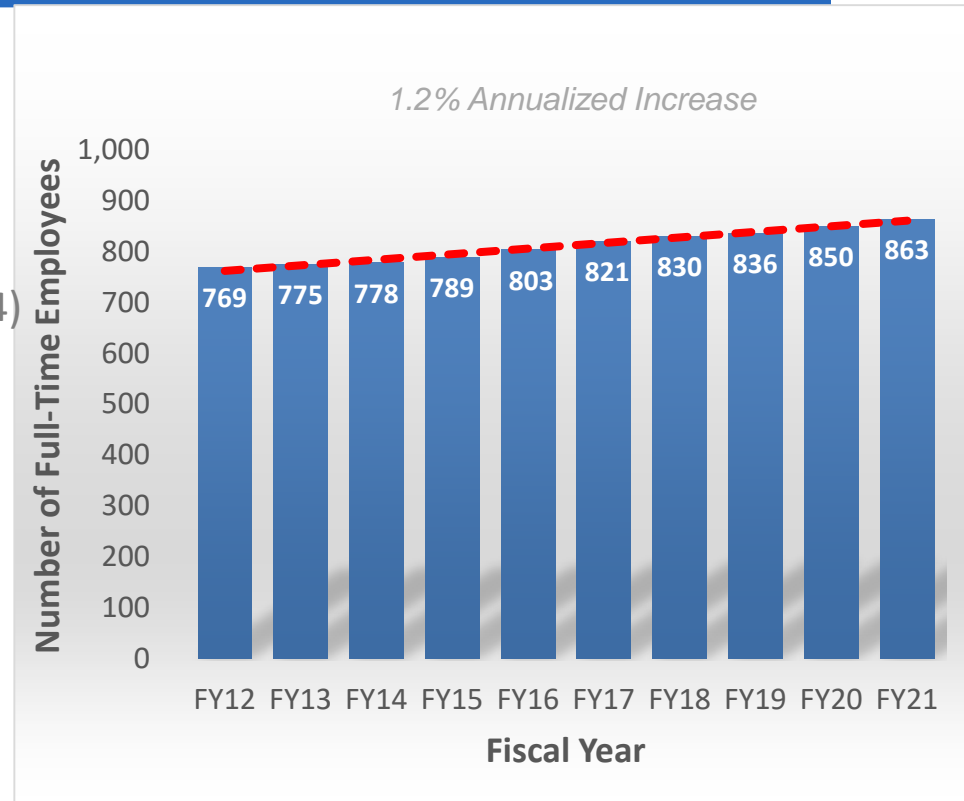
Total Operating Expenses





Proposed New Positions, Total FTEs = 850 + 12 = 862 (+1.4%)

- Personal Services up 6.2%
- Operations = 9
 - Maintenance Planner (4)
 - Lead Operator
 - Electrical & Instrumentation Specialist (4)
- Water Quality = 2
 - TSD Geologist
 - CEL Operations Coordinator
- Engineering = 1
 - Project Manager Design and Construction
- Three positions added mid-year



- Condition Assessment – up \$1.9M
 - Do the right project at the right time
- Electrical – up \$1.1M
 - Lighting upgrades at seven plants, 6-year plan
 - Various plant projects
- Pump and Haul – SPSA Leachate/Pipeline Delay – new \$475k
- Ebill/Epay Fees – James City County moving to monthly billing – up \$371k
- Software maintenance – up \$315k



Materials and Supplies (M&S) up 9.1%

- Electrical - up \$800k
 - VIP - Ovation Emerson Upgrade (DCS)
- Major Repairs and Replacements - up \$654k
 - Digester cleaning
 - Centrifuges
 - Pump station repairs and beautification (Newmarket)
 - Various plant repairs

Pension – Virginia Retirement System up 22%

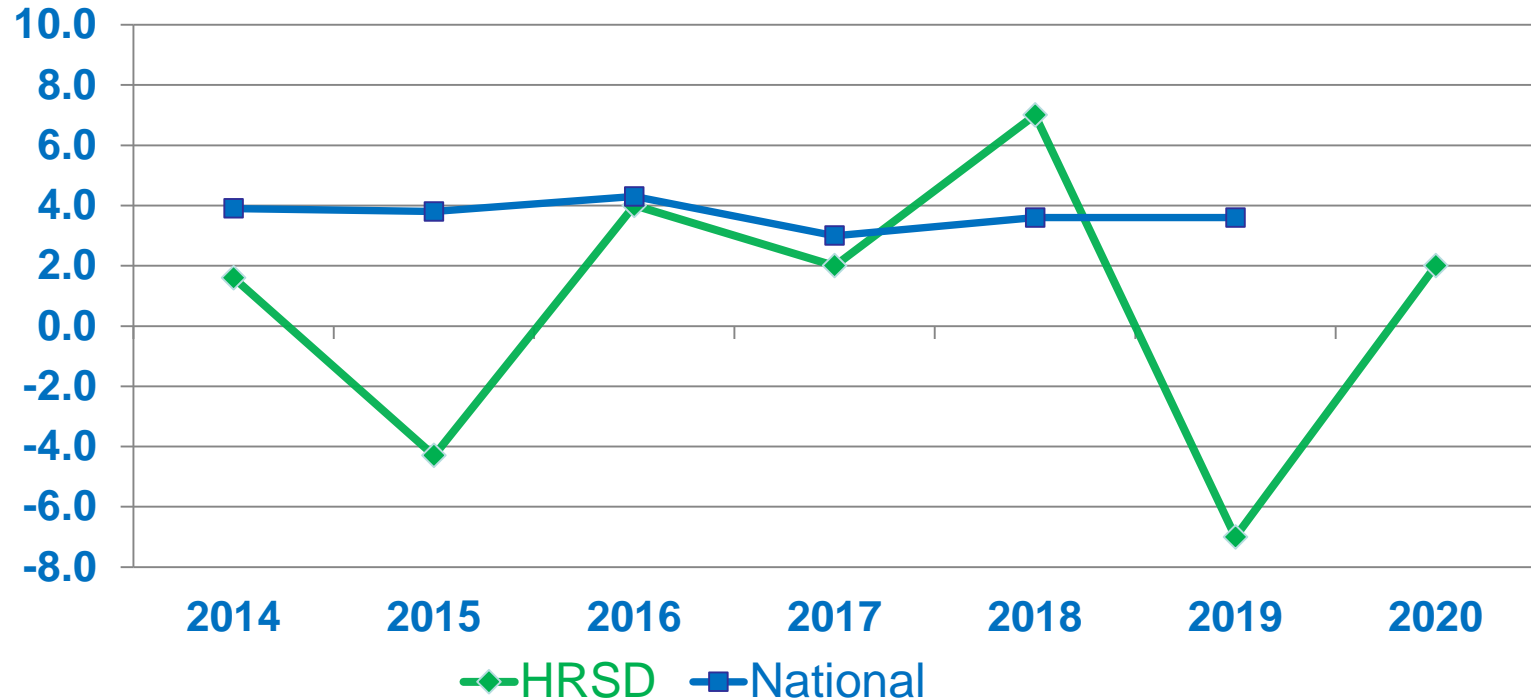
- New Expected Rate of Return = 6.75% down from 7.0%
- Lower expected investment return means contributions need to offset the increased liability
- FY21 budget is +\$777k higher (+22%)
 - Rates person increased over 1%
 - VRS 1/2 up to 7.02%
 - VRS Hybrid up to 7.89%

- Decline YOY = **-\$426k**
- Even with higher unit costs
- Process improvements offset increases
 - Research and Development

Medical & Pharmacy Cost Trends

Budget Year	Forecast Total	Actual Total	Forecast PEPM	Actual PEPM	Enrollment
FY16	\$11,529,937	\$10,218,226	\$1245	\$1103	772
FY17	\$12,224,595	\$10,661,118	\$1298	\$1125	790
FY18	\$12,488,281	\$11,706,042	\$1293	\$1203	811
FY19	\$11,603,119	\$11,078,640	\$1168	\$1115	828
FY20 YTD Basis	\$11,650,000	\$11,480,000*	\$1180	\$1141	839

Medical & Pharmacy Cost Trends -% Change



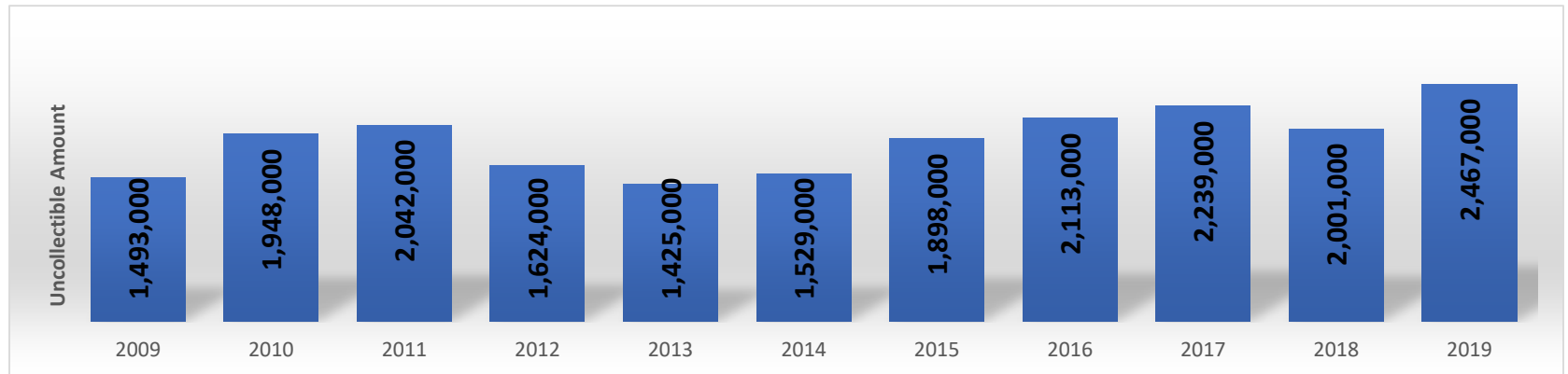
- No Changes to Deductibles
- Expansion of Preventative Drugs
 - Diabetes Supplies and Insulin
 - Some Anti-Depressant Medications
- Continue Cost Savings Strategies
 - Monitor Catastrophic and Stop Loss
 - Evaluate Strategies for Gene Therapy
- FY21 Projected \$12.0 M

Preliminary FY20 Hospitalization (Medical, Dental, Vision)

- FY20 Forecast = \$11.7M
- FY21 MMA Proposed = \$12.0M
 - Increase driven by new enrollments
 - Per employee cost is flat YOY
- **FY21 HRSD Proposed = \$11.7M**

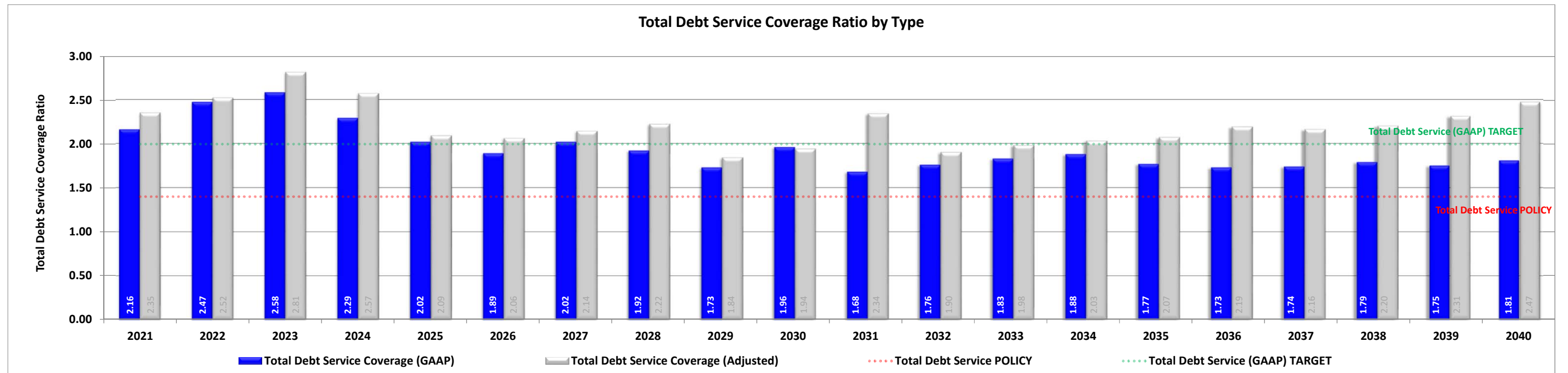
FY21 Projected Write-offs – ROUGH estimates

Customers	Unemployment	Unemployed Customers	Write-off per Unemployed Customer	Projected Write-off
482,000	5%	24,100	\$350.00	\$8,435,000
482,000	10%	48,200	\$350.00	\$16,870,000
482,000	15%	72,300	\$350.00	\$25,305,000
482,000	20%	96,400	\$350.00	\$33,740,000



Questions?

Financial Forecast (in thousands)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Operating Budget Forecast																				
Projected Annual Water Consumption Decline		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Projected Wastewater Rate Increase	0.0%	9.0%	9.0%	9.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	6.0%	6.0%	6.0%	6.0%	5.0%	5.0%	5.0%
Revenues																				
Operating Revenues	\$ 321,175	\$ 345,516	\$ 371,898	\$ 400,253	\$ 422,989	\$ 447,219	\$ 472,889	\$ 499,950	\$ 528,833	\$ 559,476	\$ 591,815	\$ 625,792	\$ 661,808	\$ 693,835	\$ 727,425	\$ 762,522	\$ 799,513	\$ 830,407	\$ 862,784	\$ 896,157
Non-operating Revenues	11,222	11,427	12,323	13,215	14,101	14,017	14,500	14,410	14,617	14,520	14,419	15,698	16,161	16,191	16,633	17,238	18,029	18,083	18,321	18,988
Total Revenues	332,397	356,943	384,221	413,468	437,090	461,236	487,389	514,360	543,450	573,996	606,235	641,490	677,969	710,026	744,059	779,760	817,542	848,490	881,105	915,145
Operating Appropriations from Budget																				
Salaries	60,953	62,946	65,004	67,130	69,325	72,052	74,393	77,272	79,768	82,347	85,945	88,461	91,423	94,093	96,842	99,674	102,591	105,595	108,689	111,877
Benefits	24,931	25,983	27,069	28,203	29,387	30,623	31,912	33,259	34,665	36,133	37,619	39,170	40,790	42,481	44,247	46,092	48,019	50,032	52,135	54,332
Materials & Supplies	9,068	9,522	9,999	10,500	11,026	13,696	14,361	17,154	17,969	18,823	28,026	28,999	31,846	32,963	34,120	35,318	36,559	37,845	39,177	40,557
Transportation	1,578	1,622	1,667	1,714	1,762	1,811	1,861	1,913	1,967	2,021	2,078	2,140	2,204	2,271	2,339	2,409	2,481	2,556	2,632	2,711
Utilities	12,954	8,512	8,747	8,988	9,236	11,614	6,960	9,045	9,346	9,658	21,439	22,243	24,475	25,398	26,356	27,350	28,383	29,455	30,568	31,724
Chemical Purchases	10,289	10,540	10,797	11,061	11,330	18,154	18,699	25,015	25,826	26,664	62,878	65,262	72,045	74,788	77,637	80,595	83,667	86,857	90,170	93,611
Contractual Services	37,696	39,581	41,560	43,638	45,820	49,096	51,541	55,174	57,911	60,785	66,875	68,935	72,154	74,389	76,693	79,070	81,521	84,048	86,655	89,343
Miscellaneous Expenses	7,631	7,860	8,096	8,339	8,589	8,847	9,112	9,386	9,667	9,957	10,256	10,564	10,881	11,207	11,543	11,890	12,246	12,614	12,992	13,382
Major Repairs and Replacements	10,076	10,378	10,690	11,010	11,341	11,681	12,031	12,392	12,764	13,147	13,541	13,947	14,366	14,797	15,241	15,698	16,169	16,654	17,154	17,668
Capital Acquisitions	600	618	637	656	675	696	716	738	760	783	806	831	855	881	908	935	963	992	1,021	1,052
Total Operating Appropriations from Budget	175,776	177,562	184,266	191,239	198,492	218,269	221,589	241,348	250,644	260,318	329,463	340,554	361,039	373,266	385,925	399,030	412,598	426,647	441,194	456,257
Debt Service																				
Debt Service	61,408	65,137	67,124	83,952	105,520	107,042	125,734	125,575	159,298	156,665	159,249	155,610	166,305	164,526	175,050	172,663	189,237	190,720	191,643	184,810
Transfer to Capital Improvement Plan (PAYGO)	94,953	113,801	132,598	138,033	132,822	112,879	139,782	135,154	133,195	156,683	61,832	122,087	144,533	149,437	153,609	170,931	207,855	215,670	215,427	245,350
Transfer to General Reserve (Unrestricted Cash)	-	-	-	-	-	22,776	-	11,985	-	-	55,344	22,874	5,709	22,393	29,051	36,690	7,383	14,959	32,321	28,182
Transfer to Risk Management Reserve	260	442	232	244	257	270	284	298	313	330	347	365	384	403	424	446	470	494	519	546
Total Appropriations	332,397	356,943	384,221	413,468	437,090	461,236	487,389	514,360	543,450	573,996	606,235	641,490	677,969	710,026	744,059	779,760	817,542	848,490	881,105	915,145
Capital Improvement Budget Forecast																				
Beginning Capital Reserves																				
Sources of Funds	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt funded (Revenue Bonds and Interim Financing)	27,678	95,274	213,128	320,365	203,258	143,607	205,713	158,346	65,305	42,807	138,168	77,913	55,467	75,563	131,391	164,069	142,145	134,330	94,573	74,650
Va Clean Water Revolving Loan Fund	96,433	3,967	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HRSD - Cash	94,953	113,801	132,598	138,033	132,822	112,879	139,782	135,154	133,195	156,683	61,832	122,087	144,533	149,437	153,609	170,931	207,855	215,670	215,427	245,350
Reimbursements	5,936	1,958	9,274	6,602	3,920	3,514	4,505	1,500	1,500	510	-	-	-	-	-	-	-	-	-	-
Total Capital Resources	235,000	215,000	355,000	465,000	340,000	260,000	350,000	295,000	200,000	200,000	200,000	200,000	200,000	225,000	285,000	335,000	350,000	350,000	310,000	320,000
Uses of Funds - Capital Expenditures	235,000	215,000	355,000	465,000	340,000	260,000	350,000	295,000	200,000	200,000	200,000	200,000	200,000	225,000	285,000	335,000	350,000	350,000	310,000	320,000
Ending Capital Resources	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserves Balance Forecast																				
Days Cash on Hand	355 days	355 days	332 days	317 days	310 days	303 days	334 days	303 days	307 days	309 days	303 days	303 days	303 days	303 days	303 days	303 days	303 days	303 days	303 days	303 days
Unrestricted Cash	\$ 187,567	\$ 187,567	\$ 187,567	\$ 187,567	\$ 187,567	\$ 210,343	\$ 210,343	\$ 222,328	\$ 222,328	\$ 222,328	\$ 277,672	\$ 300,546	\$ 306,255	\$ 328,648	\$ 357,699	\$ 394,389	\$ 401,772	\$ 416,731	\$ 449,052	\$ 477,234
Risk Reserve	4,020	4,462	4,694	4,938	5,195	5,465	5,748	6,046	6,360	6,689	7,036	7,401	7,784	8,188	8,612	9,059	9,528	10,022	10,541	11,088
Total Reserves Balance	\$ 191,587	\$ 192,029	\$ 192,261	\$ 192,505	\$ 192,762	\$ 215,807	\$ 216,091	\$ 228,374	\$ 228,688	\$ 229,017	\$ 284,708	\$ 307,947	\$ 314,039	\$ 336,836	\$ 366,311	\$ 403,447	\$ 411,300	\$ 426,753	\$ 459,593	\$ 488,322
Financial Ratios Forecast																				
Total Debt Service Coverage (GAAP)	2.16	2.47	2.58	2.29	2.02	1.89	2.02	1.92	1.73	1.96	1.68	1.76	1.83	1.88	1.77	1.73	1.74	1.79	1.75	1.81
Total Debt Service Coverage (Adjusted)	2.35	2.52	2.81	2.57	2.09	2.06	2.14	2.22	1.84	1.94	2.34	1.90	1.98	2.03	2.07	2.19	2.16	2.20	2.31	2.47
CIP % Cash Funded (current year contributions)	40%	53%	37%	30%	39%	43%	40%	46%	67%	78%	31%	61%	72%	66%	54%	51%	59%	62%	69%	77%
Debt Service as a % of Total Revenues	19%	18%	18%	21%	24%	24%	26%	25%	29%	27%	26%	24%	25%	23%	24%	22%	23%	23%	22%	20%



ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 REVENUES					
Object Codes	Sum of FY20Budget	Sum of FY21Proposed	\$Variance	%Variance	
Operating	\$ 324,650,000	\$ 321,175,000	\$ (3,475,000)	-1.1%	
AC_41100:Wastewater Service Charges	\$ 316,217,000	\$ 312,238,000	\$ (3,979,000)	-1.3%	
AC_41200:Surcharge	\$ 1,570,000	\$ 1,577,000	\$ 7,000	0.4%	
AC_41500:Indirect Discharge	\$ 2,750,000	\$ 3,200,000	\$ 450,000	16.4%	
AC_42100:Miscellaneous Fees	\$ 2,858,000	\$ 3,020,000	\$ 162,000	5.7%	
AC_42200:Miscellaneous Income	\$ 1,255,000	\$ 1,140,000	\$ (115,000)	-9.2%	
Non-operating	\$ 13,155,000	\$ 11,222,000	\$ (1,933,000)	-14.7%	
AC_45100:Facility Charges	\$ 6,160,000	\$ 6,160,000	\$ -	0.0%	
AC_45200:Investment Income	\$ 4,000,000	\$ 1,510,000	\$ (2,490,000)	-62.3%	
AC_45400:Bond Related Revenues	\$ 2,400,000	\$ 2,292,000	\$ (108,000)	-4.5%	
AC_45500:Misc Non Operating Revenue	\$ 595,000	\$ 1,250,000	\$ 655,000	110.1%	
AC_46000:Grant Funds	\$ -	\$ 10,000	\$ 10,000	0.0%	
Grand Total	\$ 337,805,000	\$ 332,397,000	\$ (5,408,000)	-1.6%	

FY21 EXPENSES by OBJECT CODE					
Row Labels	FY20_Budget	FY21_Proposed	\$Variance	%Variance	
Operating	\$ 165,658,819	\$ 175,776,066	\$ 10,117,247	6.11%	
AC_51000:Personal Services	\$ 57,346,224	\$ 60,952,502	\$ 3,606,279	6.29%	
AC_52000:Fringe Benefits	\$ 24,216,574	\$ 24,930,765	\$ 714,191	2.95%	
AC_53000:Materials And Supplies	\$ 17,550,000	\$ 19,143,816	\$ 1,593,816	9.08%	
AC_53500:Transportation	\$ 867,526	\$ 931,191	\$ 63,665	7.34%	
AC_53600:Transportation Fuels	\$ 711,280	\$ 646,820	\$ (64,460)	-9.06%	
AC_54000:Utilities	\$ 12,725,560	\$ 12,954,307	\$ 228,747	1.80%	
AC_54500:Chemical Purchases	\$ 10,714,718	\$ 10,288,858	\$ (425,860)	-3.97%	
AC_55000:Contractual Services	\$ 32,142,428	\$ 35,728,316	\$ 3,585,888	11.16%	
AC_55500:Consulting Services	\$ 1,908,800	\$ 1,968,000	\$ 59,200	3.10%	
AC_56000:Miscellaneous Expenses	\$ 2,127,464	\$ 2,375,887	\$ 248,423	11.68%	
AC_56500:Recruitment Expenses	\$ 402,700	\$ 374,500	\$ (28,200)	-7.00%	
AC_57000:Bond Issues	\$ 350,000	\$ 696,000	\$ 346,000	98.86%	
AC_57500:Apprentice Program	\$ 245,246	\$ 273,900	\$ 28,654	11.68%	
AC_58000:Insurance	\$ 3,470,000	\$ 3,330,000	\$ (140,000)	-4.03%	
AC_58500:District Memberships_AC_58500	\$ 578,699	\$ 581,203	\$ 2,504	0.43%	
AC_59000:Other Costs	\$ -	\$ -	\$ -	0.00%	
AC_60000:Capital Assets	\$ 301,600	\$ 600,000	\$ 298,400	98.94%	
Non-Operating	\$ 172,146,181	\$ 156,620,934	\$ (15,525,247)	-9.02%	
AC_70000:Transfers_AC_70000	\$ 108,601,340	\$ 95,213,112	\$ (13,388,228)	-12.33%	
AC_81000:Debt_AC_81000	\$ 48,911,523	\$ 45,304,200	\$ (3,607,323)	-7.38%	
AC_82000:VRA Debt	\$ 14,633,318	\$ 16,103,622	\$ 1,470,304	10.05%	
Grand Total	\$ 337,805,000	\$ 332,397,000	\$ (5,408,000)	-1.60%	

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by DEPARTMENT				
Row Labels	FY20_Budget	FY21_Proposed	\$Variance	%Variance
Operating	\$ 165,658,819	\$ 175,776,066	\$ 10,117,247	6.11%
Communications	\$ 444,116	\$ 472,519	\$ 28,402	6.40%
Engineering	\$ 7,689,863	\$ 6,521,954	\$ (1,167,908)	-15.19%
Finance	\$ 14,566,681	\$ 15,061,142	\$ 494,461	3.39%
General Expenses	\$ 5,179,093	\$ 7,040,888	\$ 1,861,795	35.95%
General Management	\$ 460,252	\$ 466,020	\$ 5,768	1.25%
Talent Management	\$ 2,515,281	\$ 2,574,769	\$ 59,488	2.37%
Water Quality	\$ 14,778,035	\$ 15,676,911	\$ 898,876	6.08%
Information Technology	\$ 15,854,415	\$ 16,719,711	\$ 865,296	5.46%
Bond Issuance	\$ 350,000	\$ 696,000	\$ 346,000	98.86%
Operations	\$ 103,821,084	\$ 110,546,153	\$ 6,725,068	6.48%
Non-Operating	\$ 172,146,181	\$ 156,620,934	\$ (15,525,247)	-9.02%
Transfers	\$ 108,601,340	\$ 95,213,112	\$ (13,388,228)	-12.33%
Debt	\$ 63,544,841	\$ 61,407,822	\$ (2,137,019)	-3.36%
Grand Total	\$ 337,805,000	\$ 332,397,000	\$ (5,408,000)	-1.60%

FY21 EXPENSES by OBJECT CODE							
FY21_Proposed	Column Labels						
Row Labels	Communications	Engineering	Finance	General Expenses	General Management	Talent Management	Grand Total
Operating	\$ 472,519	\$ 6,521,954	\$ 15,061,142	\$ 7,040,888	\$ 466,020	\$ 2,574,769	\$ 175,776,066
AC_51000:Personal Services	\$ 304,517	\$ 4,063,953	\$ 6,160,558	\$ (500,003)	\$ 335,927	\$ 1,577,738	\$ 60,952,502
AC_52000:Fringe Benefits	\$ 96,002	\$ 1,497,746	\$ 2,651,686	\$ (786,499)	\$ 83,592	\$ 631,674	\$ 24,930,765
AC_53000:Materials And Supplies	\$ 45,000	\$ 42,320	\$ 72,213	\$ 26,000	\$ 10,000	\$ 58,500	\$ 19,143,816
AC_53500:Transportation	\$ 9,000	\$ 26,635	\$ 7,850	\$ -	\$ 7,000	\$ 28,500	\$ 931,191
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 646,820
AC_54000:Utilities	\$ -	\$ -	\$ 279,000	\$ 480,000	\$ -	\$ -	\$ 12,954,307
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,288,858
AC_55000:Contractual Services	\$ 2,000	\$ 391,681	\$ 5,409,530	\$ 2,282,540	\$ 9,000	\$ 41,000	\$ 35,728,316
AC_55500:Consulting Services	\$ -	\$ 316,000	\$ 224,000	\$ 1,328,000	\$ -	\$ -	\$ 1,968,000
AC_56000:Miscellaneous Expenses	\$ 15,000	\$ 177,644	\$ 248,841	\$ (126,500)	\$ 20,000	\$ 105,082	\$ 2,375,887
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -	\$ 247,500	\$ -	\$ 124,000	\$ 374,500
AC_57000:Bond Issues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 696,000
AC_57500:Apprentice Program	\$ -	\$ -	\$ -	\$ 238,400	\$ -	\$ -	\$ 273,900
AC_58000:Insurance	\$ -	\$ -	\$ -	\$ 3,330,000	\$ -	\$ -	\$ 3,330,000
AC_58500:District Memberships_AC_58500	\$ 1,000	\$ 5,975	\$ 7,463	\$ 521,450	\$ 500	\$ 8,275	\$ 581,203
AC_59000:Other Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AC_60000:Capital Assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000
Grand Total	\$ 472,519	\$ 6,521,954	\$ 15,061,142	\$ 7,040,888	\$ 466,020	\$ 2,574,769	\$ 175,776,066

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by OBJECT CODE					
		Column Labels ▼			
		Communications			
Row Labels ▼	Sum of FY20Budget	FY21_ Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 444,116	\$ 472,519	\$ 28,402	6.4%	
AC_51000:Personal Services	\$ 237,112	\$ 304,517	\$ 67,405	28.4%	
AC_52000:Fringe Benefits	\$ 88,005	\$ 96,002	\$ 7,997	9.1%	
AC_53000:Materials And Supplies	\$ 45,000	\$ 45,000	\$ -	0.0%	
AC_53500:Transportation	\$ 11,500	\$ 9,000	\$ (2,500)	-21.7%	
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -	0.0%	
AC_54000:Utilities	\$ -	\$ -	\$ -	0.0%	
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -	0.0%	
AC_55000:Contractual Services	\$ 33,000	\$ 2,000	\$ (31,000)	-93.9%	
AC_55500:Consulting Services	\$ -	\$ -	\$ -	0.0%	
AC_56000:Miscellaneous Expenses	\$ 28,000	\$ 15,000	\$ (13,000)	-46.4%	
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -	0.0%	
AC_57000:Bond Issues	\$ -	\$ -	\$ -	0.0%	
AC_57500:Apprentice Program	\$ -	\$ -	\$ -	0.0%	
AC_58000:Insurance	\$ -	\$ -	\$ -	0.0%	
AC_58500:District Memberships_AC_58500	\$ 1,500	\$ 1,000	\$ (500)	-33.3%	
AC_59000:Other Costs	\$ -	\$ -	\$ -	0.0%	
AC_60000:Capital Assets	\$ -	\$ -	\$ -	0.0%	
Grand Total	\$ 444,116	\$ 472,519	\$ 28,402	6.4%	

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by OBJECT CODE					
		Column Labels <input type="checkbox"/>			
		Engineering			
Row Labels <input type="checkbox"/>	Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 7,689,863	\$ 6,521,954	\$ (1,167,908)		-15.2%
AC_51000:Personal Services	\$ 3,983,260	\$ 4,063,953	\$ 80,692		2.0%
AC_52000:Fringe Benefits	\$ 1,479,398	\$ 1,497,746	\$ 18,348		1.2%
AC_53000:Materials And Supplies	\$ 24,130	\$ 42,320	\$ 18,190		75.4%
AC_53500:Transportation	\$ 20,470	\$ 26,635	\$ 6,165		30.1%
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities	\$ -	\$ -	\$ -		0.0%
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services	\$ 1,617,816	\$ 391,681	\$ (1,226,135)		-75.8%
AC_55500:Consulting Services	\$ 381,000	\$ 316,000	\$ (65,000)		-17.1%
AC_56000:Miscellaneous Expenses	\$ 174,900	\$ 177,644	\$ 2,744		1.6%
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -		0.0%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance	\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500	\$ 8,888	\$ 5,975	\$ (2,913)		-32.8%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ -	\$ -	\$ -		0.0%
Grand Total	\$ 7,689,863	\$ 6,521,954	\$ (1,167,908)		-15.2%

FY21 EXPENSES by OBJECT CODE					
		Column Labels <input type="checkbox"/>			
		Finance			
Row Labels <input type="checkbox"/>	Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 14,566,681	\$ 15,061,142	\$ 494,461		3.4%
AC_51000:Personal Services	\$ 6,066,008	\$ 6,160,558	\$ 94,550		1.6%
AC_52000:Fringe Benefits	\$ 2,630,381	\$ 2,651,686	\$ 21,306		0.8%
AC_53000:Materials And Supplies	\$ 70,780	\$ 72,213	\$ 1,433		2.0%
AC_53500:Transportation	\$ 11,850	\$ 7,850	\$ (4,000)		-33.8%
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities	\$ 282,000	\$ 279,000	\$ (3,000)		-1.1%
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services	\$ 4,975,664	\$ 5,409,530	\$ 433,866		8.7%
AC_55500:Consulting Services	\$ 260,800	\$ 224,000	\$ (36,800)		-14.1%
AC_56000:Miscellaneous Expenses	\$ 257,900	\$ 248,841	\$ (9,059)		-3.5%
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -		0.0%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance	\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500	\$ 11,298	\$ 7,463	\$ (3,835)		-33.9%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ -	\$ -	\$ -		0.0%
Grand Total	\$ 14,566,681	\$ 15,061,142	\$ 494,461		3.4%

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by OBJECT CODE						
		Column Labels				
		General Management				
Row Labels		Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating		\$ 460,252	\$ 466,020	\$ 5,768		1.3%
AC_51000:Personal Services		\$ 332,938	\$ 335,927	\$ 2,990		0.9%
AC_52000:Fringe Benefits		\$ 80,814	\$ 83,592	\$ 2,778		3.4%
AC_53000:Materials And Supplies		\$ 10,000	\$ 10,000	\$ -		0.0%
AC_53500:Transportation		\$ 7,000	\$ 7,000	\$ -		0.0%
AC_53600:Transportation Fuels		\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities		\$ -	\$ -	\$ -		0.0%
AC_54500:Chemical Purchases		\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services		\$ 9,000	\$ 9,000	\$ -		0.0%
AC_55500:Consulting Services		\$ -	\$ -	\$ -		0.0%
AC_56000:Miscellaneous Expenses		\$ 20,000	\$ 20,000	\$ -		0.0%
AC_56500:Recruitment Expenses		\$ -	\$ -	\$ -		0.0%
AC_57000:Bond Issues		\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program		\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance		\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500		\$ 500	\$ 500	\$ -		0.0%
AC_59000:Other Costs		\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets		\$ -	\$ -	\$ -		0.0%
Grand Total		\$ 460,252	\$ 466,020	\$ 5,768		1.3%

FY21 EXPENSES by OBJECT CODE						
		Column Labels				
		Talent Management				
Row Labels		Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating		\$ 2,515,281	\$ 2,574,769	\$ 59,488		2.4%
AC_51000:Personal Services		\$ 1,531,227	\$ 1,577,738	\$ 46,510		3.0%
AC_52000:Fringe Benefits		\$ 615,845	\$ 631,674	\$ 15,829		2.6%
AC_53000:Materials And Supplies		\$ 58,500	\$ 58,500	\$ -		0.0%
AC_53500:Transportation		\$ 28,100	\$ 28,500	\$ 400		1.4%
AC_53600:Transportation Fuels		\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities		\$ -	\$ -	\$ -		0.0%
AC_54500:Chemical Purchases		\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services		\$ 48,000	\$ 41,000	\$ (7,000)		-14.6%
AC_55500:Consulting Services		\$ -	\$ -	\$ -		0.0%
AC_56000:Miscellaneous Expenses		\$ 74,534	\$ 105,082	\$ 30,548		41.0%
AC_56500:Recruitment Expenses		\$ 150,700	\$ 124,000	\$ (26,700)		-17.7%
AC_57000:Bond Issues		\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program		\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance		\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500		\$ 8,375	\$ 8,275	\$ (100)		-1.2%
AC_59000:Other Costs		\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets		\$ -	\$ -	\$ -		0.0%
Grand Total		\$ 2,515,281	\$ 2,574,769	\$ 59,488		2.4%

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by OBJECT CODE					
	Column Labels <input type="button" value="v"/>				
	Water Quality				
Row Labels <input type="button" value="v"/>	Sum of FY20Budget	FY21_ Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 14,778,035	\$ 15,676,911	\$ 898,876		6.1%
AC_51000:Personal Services	\$ 7,815,546	\$ 8,324,104	\$ 508,558		6.5%
AC_52000:Fringe Benefits	\$ 3,199,333	\$ 3,346,602	\$ 147,268		4.6%
AC_53000:Materials And Supplies	\$ 1,415,500	\$ 1,605,700	\$ 190,200		13.4%
AC_53500:Transportation	\$ 30,406	\$ 35,706	\$ 5,300		17.4%
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities	\$ 2,700	\$ 2,700	\$ -		0.0%
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services	\$ 1,696,700	\$ 1,726,700	\$ 30,000		1.8%
AC_55500:Consulting Services	\$ -	\$ -	\$ -		0.0%
AC_56000:Miscellaneous Expenses	\$ 607,350	\$ 627,550	\$ 20,200		3.3%
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -		0.0%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance	\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500	\$ 10,500	\$ 7,850	\$ (2,650)		-25.2%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ -	\$ -	\$ -		0.0%
Grand Total	\$ 14,778,035	\$ 15,676,911	\$ 898,876		6.1%

FY21 EXPENSES by OBJECT CODE					
	Column Labels <input type="button" value="v"/>				
	Information Technology				
Row Labels <input type="button" value="v"/>	Sum of FY20Budget	FY21_ Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 15,854,415	\$ 16,719,711	\$ 865,296		5.5%
AC_51000:Personal Services	\$ 4,428,545	\$ 4,828,740	\$ 400,195		9.0%
AC_52000:Fringe Benefits	\$ 1,554,295	\$ 1,621,071	\$ 66,776		4.3%
AC_53000:Materials And Supplies	\$ 1,901,050	\$ 2,244,250	\$ 343,200		18.1%
AC_53500:Transportation	\$ 22,200	\$ 23,700	\$ 1,500		6.8%
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities	\$ 1,180,500	\$ 1,340,000	\$ 159,500		13.5%
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services	\$ 6,502,100	\$ 6,333,050	\$ (169,050)		-2.6%
AC_55500:Consulting Services	\$ -	\$ -	\$ -		0.0%
AC_56000:Miscellaneous Expenses	\$ 245,000	\$ 320,150	\$ 75,150		30.7%
AC_56500:Recruitment Expenses	\$ 3,000	\$ 3,000	\$ -		0.0%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ -	\$ -	\$ -		0.0%
AC_58000:Insurance	\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500	\$ 17,725	\$ 5,750	\$ (11,975)		-67.6%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ -	\$ -	\$ -		0.0%
Grand Total	\$ 15,854,415	\$ 16,719,711	\$ 865,296		5.5%

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

FY21 EXPENSES by OBJECT CODE					
	Column Labels <input type="checkbox"/>				
	Operations				
Row Labels <input type="checkbox"/>	Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 103,821,084	\$ 110,546,153	\$ 6,725,068		6.5%
AC_51000:Personal Services	\$ 34,501,595	\$ 35,856,970	\$ 1,355,374		3.9%
AC_52000:Fringe Benefits	\$ 15,418,203	\$ 15,788,890	\$ 370,687		2.4%
AC_53000:Materials And Supplies	\$ 14,007,040	\$ 15,039,833	\$ 1,032,793		7.4%
AC_53500:Transportation	\$ 736,000	\$ 792,800	\$ 56,800		7.7%
AC_53600:Transportation Fuels	\$ 711,280	\$ 646,820	\$ (64,460)		-9.1%
AC_54000:Utilities	\$ 10,755,360	\$ 10,852,607	\$ 97,247		0.9%
AC_54500:Chemical Purchases	\$ 10,714,718	\$ 10,288,858	\$ (425,860)		-4.0%
AC_55000:Contractual Services	\$ 15,576,648	\$ 19,532,815	\$ 3,956,167		25.4%
AC_55500:Consulting Services	\$ -	\$ 100,000	\$ 100,000		0.0%
AC_56000:Miscellaneous Expenses	\$ 1,070,780	\$ 988,120	\$ (82,660)		-7.7%
AC_56500:Recruitment Expenses	\$ -	\$ -	\$ -		0.0%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ 5,500	\$ 35,500	\$ 30,000		545.5%
AC_58000:Insurance	\$ -	\$ -	\$ -		0.0%
AC_58500:District Memberships_AC_58500	\$ 22,360	\$ 22,940	\$ 580		2.6%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ 301,600	\$ 600,000	\$ 298,400		98.9%
Grand Total	\$ 103,821,084	\$ 110,546,153	\$ 6,725,068		6.5%

FY21 EXPENSES by OBJECT CODE					
	Column Labels <input type="checkbox"/>				
	General Expenses				
Row Labels <input type="checkbox"/>	Sum of FY20Budget	FY21_Proposed	Sum of Variance	Sum of VarPercent	
Operating	\$ 5,179,093	\$ 7,040,888	\$ 1,861,795		35.9%
AC_51000:Personal Services	\$ (1,550,006)	\$ (500,003)	\$ 1,050,003		-67.7%
AC_52000:Fringe Benefits	\$ (849,700)	\$ (786,499)	\$ 63,201		-7.4%
AC_53000:Materials And Supplies	\$ 18,000	\$ 26,000	\$ 8,000		44.4%
AC_53500:Transportation	\$ -	\$ -	\$ -		0.0%
AC_53600:Transportation Fuels	\$ -	\$ -	\$ -		0.0%
AC_54000:Utilities	\$ 505,000	\$ 480,000	\$ (25,000)		-5.0%
AC_54500:Chemical Purchases	\$ -	\$ -	\$ -		0.0%
AC_55000:Contractual Services	\$ 1,683,500	\$ 2,282,540	\$ 599,040		35.6%
AC_55500:Consulting Services	\$ 1,267,000	\$ 1,328,000	\$ 61,000		4.8%
AC_56000:Miscellaneous Expenses	\$ (351,000)	\$ (126,500)	\$ 224,500		-64.0%
AC_56500:Recruitment Expenses	\$ 249,000	\$ 247,500	\$ (1,500)		-0.6%
AC_57000:Bond Issues	\$ -	\$ -	\$ -		0.0%
AC_57500:Apprentice Program	\$ 239,746	\$ 238,400	\$ (1,346)		-0.6%
AC_58000:Insurance	\$ 3,470,000	\$ 3,330,000	\$ (140,000)		-4.0%
AC_58500:District Memberships_AC_58500	\$ 497,553	\$ 521,450	\$ 23,897		4.8%
AC_59000:Other Costs	\$ -	\$ -	\$ -		0.0%
AC_60000:Capital Assets	\$ -	\$ -	\$ -		0.0%
Grand Total	\$ 5,179,093	\$ 7,040,888	\$ 1,861,795		35.9%

ANNUAL BUDGET – Fiscal Year 2021 (July 1, 2020 – June 30, 2021)

DEBT SERVICE and TRANSFERS

FY21 EXPENSES by OBJECT CODE				
Row Labels	Sum of FY20Budget	FY21_ Proposed	Sum of Variance	Sum of VarPercent
☐ Bond Issuance	\$ 350,000	\$ 696,000	\$ 346,000	98.9%
☐ Operating	\$ 350,000	\$ 696,000	\$ 346,000	98.9%
☐ AC_57000:Bond Issues	\$ 350,000	\$ 696,000	\$ 346,000	98.9%
☐ Transfers	\$ 108,601,340	\$ 95,213,112	\$ (13,388,228)	-12.3%
☐ Non-Operating	\$ 108,601,340	\$ 95,213,112	\$ (13,388,228)	-12.3%
☐ AC_70000:Transfers_AC_70000	\$ 108,601,340	\$ 95,213,112	\$ (13,388,228)	-12.3%
AC_70100:Trans To General Reserve	\$ -	\$ -	\$ -	0.0%
AC_70200:Trans To Construction	\$ 108,341,340	\$ 94,953,112	\$ (13,388,228)	-12.4%
AC_70300:Transfers To Revenue Fund	\$ -	\$ -	\$ -	0.0%
AC_70400:Trans To Risk Mgmt	\$ 260,000	\$ 260,000	\$ -	0.0%
☐ Debt	\$ 63,544,841	\$ 61,407,822	\$ (2,137,019)	-3.4%
☐ Non-Operating	\$ 63,544,841	\$ 61,407,822	\$ (2,137,019)	-3.4%
☐ AC_81000:Debt_AC_81000	\$ 48,911,523	\$ 45,304,200	\$ (3,607,323)	-7.4%
AC_81100:Debt-Amortization Expense	\$ -	\$ -	\$ -	0.0%
AC_81200:Arbitrage Expense	\$ -	\$ -	\$ -	0.0%
AC_81300:Bonds-Fiscal Agent	\$ -	\$ -	\$ -	0.0%
AC_81400:Bond Issuance Expense	\$ -	\$ -	\$ -	0.0%
AC_81505:Bond Principal	\$ 17,985,000	\$ 21,545,000	\$ 3,560,000	19.8%
AC_81510:Bond Interest	\$ 30,926,523	\$ 23,759,200	\$ (7,167,323)	-23.2%
☐ AC_82000:VRA Debt	\$ 14,633,318	\$ 16,103,622	\$ 1,470,304	10.0%
AC_82111:VRA Principal	\$ 10,740,060	\$ 10,630,200	\$ (109,860)	-1.0%
AC_82211:VRA Interest	\$ 3,893,258	\$ 5,473,422	\$ 1,580,164	40.6%
Grand Total	\$ 172,496,181	\$ 157,316,934	\$ (15,179,247)	-8.8%

Capital Budget

HRSD prepares a Capital Improvement Program (CIP) each year for the capital projects currently underway or proposed for the future. The first year of the CIP is authorized as the Capital Budget for FY-2021 in the amount of \$235 million. The remaining years (FY-2022 to FY-2030) include all known projects planned for these years; however, approval of the plan does not authorize the Capital Budgets for those years. Each year's Capital Budget will be approved during the budget process for the specific year.

The ten-year Capital Improvement Program for FY-2021 to FY-2030 highlights the anticipated cost of each project and the fiscal year(s) in which the work is expected to occur. All costs listed in the CIP are stated in current year dollars and total approximately \$2.92 billion.

CIP Budget Forecast (in thousands)	Total FY-2021 to FY-2030	FY-2021	FY-2022	FY-2023	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
Beginning Capital Reserves	10,000	10,000	0	0	0	0	0	0	0	0	0
Bonds	1,475,481	27,678	95,274	213,128	320,365	203,258	143,607	205,713	158,346	65,305	42,807
VCWRLF	100,400	96,433	3,967	-	-	-	-	-	-	-	-
Cash	1,289,900	94,953	113,801	132,598	138,033	132,822	112,879	139,782	135,154	133,195	156,683
Grants and Other Reimbursements	39,219	5,936	1,958	9,274	6,602	3,920	3,514	4,505	1,500	1,500	510
Total Capital Resources	2,915,000	235,000	215,000	355,000	465,000	340,000	260,000	350,000	295,000	200,000	200,000
Capital Expenditures	2,915,000	235,000	215,000	355,000	465,000	340,000	260,000	350,000	295,000	200,000	200,000
Ending Capital Reserves	0	0	0	0	0	0	0	0	0	0	0

Capital Expenditures (in thousands)	Total FY-2021 to FY-2030	FY-2021	FY-2022	FY-2023	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
Administration	27,211	13,011	4,540	3,460	3,100	3,100	-	-	-	-	-
Army Base	71,407	1,288	9,835	11,663	-	-	642	1,638	365	18,452	27,523
Atlantic	72,332	6,631	12,591	19,837	20,744	10,432	1,249	53	297	498	-
Boat Harbor	254,724	32,842	34,581	12,384	54,056	90,830	15,123	12,028	2,881	-	-
Chesapeake-Elizabeth	70,776	49,883	10,329	2,881	2,726	1,321	1,211	-	-	-	2,424
Eastern Shore	23,200	1,200	1,000	5,000	8,000	1,000	3,000	4,000	-	-	-
James River	184,876	16,564	19,483	62,746	65,431	20,652	-	-	-	-	-
Middle Peninsula	106,723	10,279	6,787	27,918	36,372	17,723	7,639	5	-	-	-
Nansemond	317,153	22,097	21,460	32,584	103,738	88,378	18,138	4,957	16,876	8,916	8
Surry	31,623	16,499	15,123	-	-	-	-	-	-	-	-
Virginia Initiative Plant	145,625	11,694	22,628	33,141	28,942	10,477	6,553	1,790	10,395	10,806	9,199
Williamsburg	15,063	12,622	1,602	839	-	-	-	-	-	-	-
York River	46,496	4,958	5,343	9,115	8,444	12,154	5,466	1,016	-	-	-
General	1,366,723	35,432	45,482	116,527	111,304	67,741	188,597	307,846	250,139	142,591	101,063
Future Improvements	59,473	-	-	-	-	-	-	-	-	9,214	50,259
Sub-Total	2,793,403	235,000	210,784	338,095	442,857	323,810	247,619	333,333	280,952	190,476	190,476
Contingency	121,597	-	4,216	16,905	22,143	16,190	12,381	16,667	14,048	9,524	9,524
Total Expenditures	2,915,000	235,000	215,000	355,000	465,000	340,000	260,000	350,000	295,000	200,000	200,000

The bond component of the plan may include one or all of the following:

- Interim or construction financings
- Federally subsidized borrowing programs administered by the Virginia Resource Authority
- HRSD Revenue Bonds or Notes

The grant component represents funds estimated to be received from a federal or state agency for specific projects. Other reimbursements, if any, include amounts paid by other parties who may participate in a project.

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	Total				
		FY-21 to FY-30	FY-21	FY-22	FY-23	FY-24
Administration						
PR_AD012100	Asset Management Implementation	\$ 482	\$ 482	\$ -	\$ -	\$ -
PR_AD012200	Water Quality Services Building Phase II	\$ 9,154	\$ 9,154	\$ -	\$ -	\$ -
PR_AD012300	Central Environmental Laboratory Phase II	\$ 2,075	\$ 275	\$ 1,440	\$ 360	\$ -
PR_AD012500	Cybersecurity Practice & Procedure Initiative	\$ 15,500	\$ 3,100	\$ 3,100	\$ 3,100	\$ 3,100
	Subtotal	\$ 27,211	\$ 13,011	\$ 4,540	\$ 3,460	\$ 3,100
Army Base						
PR_AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ 19,775	\$ 782	\$ 8,453	\$ 10,541	\$ -
PR_AB010500	Section W Force Main Replacement	\$ 2,112	\$ 81	\$ 908	\$ 1,122	\$ -
PR_AB011800	Army Base to VIP Transmission Force Main	\$ 49,927	\$ -	\$ -	\$ -	\$ -
PR_AB011900	Army Base Treatment Plant Administration Building Renovation	\$ 900	\$ 425	\$ 475	\$ -	\$ -
	Subtotal	\$ 71,407	\$ 1,288	\$ 9,835	\$ 11,663	\$ -
Atlantic						
PR_AT011520	Shippo Corner Pressure Reducing Station Modifications	\$ 1,476	\$ 109	\$ 683	\$ 683	\$ -
PR_AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ 4,524	\$ -	\$ 64	\$ 232	\$ 2,135
PR_AT012910	Atlantic Treatment Plant FOG Receiving Station	\$ 301	\$ 301	\$ -	\$ -	\$ -
PR_AT012920	Atlantic Treatment Plant Access Road Extension	\$ 10,278	\$ 822	\$ 925	\$ 4,084	\$ 4,447
PR_AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ 3,587	\$ 425	\$ 3,163	\$ -	\$ -
PR_AT013100	South Norfolk Area Gravity Sewer Improvements	\$ 5,558	\$ 340	\$ 302	\$ 3,278	\$ 1,639
PR_AT013200	Dozier's Corner Pump Station and Washington District Pump Station	\$ 263	\$ -	\$ -	\$ 17	\$ 40
PR_AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	\$ 2,599	\$ 2,599	\$ -	\$ -	\$ -
PR_AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin R	\$ 93	\$ 93	\$ -	\$ -	\$ -
PR_AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ 810	\$ 810	\$ -	\$ -	\$ -
PR_AT014100	Suffolk Regional Landfill Transmission Force Main	\$ 12,900	\$ 133	\$ 2,994	\$ 6,545	\$ 3,227
PR_AT014301	Atlantic Service Area I-I Reduction Phase I (CHES)	\$ 10,970	\$ -	\$ -	\$ -	\$ 1,609
PR_AT014302	Atlantic Service Area I-I Reduction Phase II (CHES)	\$ 9,334	\$ -	\$ 936	\$ 2,160	\$ 6,218
PR_AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ 849	\$ -	\$ -	\$ -	\$ -
PR_AT014500	Atlantic Treatment Plant Influent Screens (1-3) Replacement	\$ 3,440	\$ 662	\$ 2,778	\$ -	\$ -
PR_AT014600	Kempsville Interceptor Force Main Replacement - Phase I	\$ 5,350	\$ 338	\$ 746	\$ 2,838	\$ 1,429
	Subtotal	\$ 72,332	\$ 6,631	\$ 12,591	\$ 19,837	\$ 20,744
Boat Harbor						
PR_BH013020	Willard Avenue Pump Station Replacement	\$ 9,354	\$ 3,748	\$ 5,601	\$ 5	\$ -
PR_BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ 3,627	\$ 265	\$ 1,108	\$ 2,252	\$ 3
PR_BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Ph	\$ 14,492	\$ 6,300	\$ 7,548	\$ 644	\$ -
PR_BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	\$ 2,014	\$ 16	\$ 585	\$ 1,414	\$ -
PR_BH014600	46th Street Diversion Sewer Rehabilitation Replacement	\$ 10,747	\$ 3,111	\$ 7,039	\$ 597	\$ -
PR_BH014700	Boat Harbor Outlet Sewer Improvements	\$ 3,483	\$ 3,483	\$ -	\$ -	\$ -
PR_BH014800	Jefferson Avenue Extension Gravity Improvements	\$ 441	\$ 441	\$ -	\$ -	\$ -
PR_BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvement	\$ 4,326	\$ 748	\$ 3,573	\$ 5	\$ -
PR_BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	\$ 4	\$ 4	\$ -	\$ -	\$ -
PR_BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacement	\$ 1,723	\$ 1,723	\$ -	\$ -	\$ -
PR_BH015500	LaSalle Avenue Interceptor Force Main Replacement	\$ 1,920	\$ -	\$ -	\$ -	\$ 83
PR_BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Waln	\$ 15,121	\$ 10,667	\$ 4,454	\$ -	\$ -
PR_BH015700	Boat Harbor Treatment Plant Pump Station Conversion	\$ 62,111	\$ 926	\$ 2,241	\$ 556	\$ 18,760
PR_BH015710	Boat Harbor Treatment Plant Transmission Force Main Section 1	\$ 65,649	\$ 947	\$ 594	\$ 4,094	\$ 30,196
PR_BH015720	Boat Harbor Treatment Plant Transmission Force Main Section 2	\$ 16,412	\$ 282	\$ 1,060	\$ 150	\$ 3,656
PR_BH015801	14th Street Off-Line Storage (BH-HPP-01A)	\$ 14,828	\$ -	\$ -	\$ 868	\$ 822
PR_BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 10,938	\$ -	\$ -	\$ -	\$ 535
PR_BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ 14,776	\$ -	\$ -	\$ -	\$ -
PR_BH015900	Bloxoms Corner Force Main Replacement	\$ 2,760	\$ 182	\$ 778	\$ 1,800	\$ -
	Subtotal	\$ 254,724	\$ 32,842	\$ 34,581	\$ 12,384	\$ 54,056
Chesapeake-Elizabeth						
PR_CE010400	Independence Boulevard Pressure Reducing Station Modifications	\$ 523	\$ 523	\$ -	\$ -	\$ -
PR_CE010520	Newtown Road Interceptor Force Main Relocation	\$ 3,711	\$ 2,972	\$ 738	\$ -	\$ -
PR_CE011300	Boulevard Replacement Phase II	\$ 1,062	\$ -	\$ 69	\$ 993	\$ -
PR_CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	\$ 1,822	\$ 22	\$ 136	\$ 655	\$ 1,009
PR_CE011700	Western Trunk Force Main Replacement	\$ 1,766	\$ 1,454	\$ 311	\$ -	\$ -
PR_CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ 11,082	\$ -	\$ 1,000	\$ 1,000	\$ 1,000
PR_CE011821	Elbow Road Pressure Reducing Station	\$ 4,391	\$ 4,389	\$ 3	\$ -	\$ -
PR_CE011822	Providence Road PRS Upgrades and Interconnect Force Main	\$ 4,800	\$ 4,800	\$ -	\$ -	\$ -
PR_CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ 17,189	\$ 12,131	\$ 5,058	\$ -	\$ -
PR_CE011825	Salem Road Interconnect Force Main	\$ 1,110	\$ 1,110	\$ -	\$ -	\$ -
PR_CE011826	Providence Road Off-Line Storage Facility	\$ 17,964	\$ 17,964	\$ -	\$ -	\$ -
PR_CE011827	Atlantic PRS Reliability Modifications	\$ 2,565	\$ 2,565	\$ -	\$ -	\$ -
PR_CE011830	Little Creek Pump Station Modifications	\$ 317	\$ 317	\$ -	\$ -	\$ -
PR_CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ 1,510	\$ -	\$ 1,510	\$ -	\$ -
PR_CE011836	Norfolk City Pump Station Upgrades	\$ 993	\$ 380	\$ 613	\$ -	\$ -
PR_CE011840	Oceana Off-Line Storage Facility	\$ 72	\$ 67	\$ 6	\$ -	\$ -
PR_CE011850	Atlantic Service Area Automated Diversion Facilities Phase I	\$ 1,931	\$ 1,181	\$ 750	\$ -	\$ -
PR_CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 3,622	\$ 3	\$ 135	\$ 234	\$ 717
PR_CE012200	Pine Tree PRS Reliability Modifications	\$ 5	\$ 5	\$ -	\$ -	\$ -
	Subtotal	\$ 70,776	\$ 49,883	\$ 10,329	\$ 2,881	\$ 2,726
Eastern Shore						
PR_ES010000	Eastern Shore Infrastructure Improvements - Interim Plant Improvements	\$ 1,200	\$ 1,200	\$ -	\$ -	\$ -
PR_ES010100	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I	\$ 14,000	\$ -	\$ 1,000	\$ 5,000	\$ 8,000
PR_ES010200	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase II	\$ 8,000	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 23,200	\$ 1,200	\$ 1,000	\$ 5,000	\$ 8,000

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	FY-25	FY-26	FY-27	FY-28	FY-29	FY-30
Administration							
PR_AD012100	Asset Management Implementation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AD012200	Water Quality Services Building Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AD012300	Central Environmental Laboratory Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AD012500	Cybersecurity Practice & Procedure Initiative	\$ 3,100	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 3,100	\$ -	\$ -	\$ -	\$ -	\$ -
Army Base							
PR_AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AB010500	Section W Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AB011800	Army Base to VIP Transmission Force Main	\$ -	\$ 642	\$ 1,638	\$ 365	\$ 18,452	\$ 27,523
PR_AB011900	Army Base Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ 642	\$ 1,638	\$ 365	\$ 18,452	\$ 27,523
Atlantic							
PR_AT011520	Shippo Corner Pressure Reducing Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ 2,094	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT012910	Atlantic Treatment Plant FOG Receiving Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT012920	Atlantic Treatment Plant Access Road Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT013100	South Norfolk Area Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT013200	Doziers Corner Pump Station and Washington District Pump Station	\$ 206	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT014100	Suffolk Regional Landfill Transmission Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT014301	Atlantic Service Area I-I Reduction Phase I (CHES)	\$ 8,119	\$ 1,242	\$ -	\$ -	\$ -	\$ -
PR_AT014302	Atlantic Service Area I-I Reduction Phase II (CHES)	\$ 13	\$ 7	\$ -	\$ -	\$ -	\$ -
PR_AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ -	\$ -	\$ 53	\$ 297	\$ 498	\$ -
PR_AT014500	Atlantic Treatment Plant Influent Screens (1-3) Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_AT014600	Kempsville Interceptor Force Main Replacement - Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 10,432	\$ 1,249	\$ 53	\$ 297	\$ 498	\$ -
Boat Harbor							
PR_BH013020	Willard Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014600	46th Street Diversion Sewer Rehabilitation Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014700	Boat Harbor Outlet Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014800	Jefferson Avenue Extension Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015500	LaSalle Avenue Interceptor Force Main Replacement	\$ 1,144	\$ 692	\$ -	\$ -	\$ -	\$ -
PR_BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Walnut	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015700	Boat Harbor Treatment Plant Pump Station Conversion	\$ 38,778	\$ 850	\$ -	\$ -	\$ -	\$ -
PR_BH015710	Boat Harbor Treatment Plant Transmission Force Main Section 1	\$ 29,818	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015720	Boat Harbor Treatment Plant Transmission Force Main Section 2	\$ 11,264	\$ -	\$ -	\$ -	\$ -	\$ -
PR_BH015801	14th Street Off-line Storage (BH-HPP-01A)	\$ 8,260	\$ 4,878	\$ -	\$ -	\$ -	\$ -
PR_BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 751	\$ 6,265	\$ 3,387	\$ -	\$ -	\$ -
PR_BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ 815	\$ 2,438	\$ 8,642	\$ 2,881	\$ -	\$ -
PR_BH015900	Bloxoms Corner Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 90,830	\$ 15,123	\$ 12,028	\$ 2,881	\$ -	\$ -
Chesapeake-Elizabeth							
PR_CE010400	Independence Boulevard Pressure Reducing Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE010520	Newtown Road Interceptor Force Main Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011300	Boulevard Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011700	Western Trunk Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,424
PR_CE011821	Elbow Road Pressure Reducing Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011822	Providence Road PRS Upgrades and Interconnect Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011825	Salem Road Interconnect Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011826	Providence Road Off-Line Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011827	Atlantic PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011830	Little Creek Pump Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011836	Norfolk City Pump Station Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011840	Oceana Off-Line Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE011850	Atlantic Service Area Automated Diversion Facilities Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 1,321	\$ 1,211	\$ -	\$ -	\$ -	\$ -
PR_CE012200	Pine Tree PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 1,321	\$ 1,211	\$ -	\$ -	\$ -	\$ 2,424
Eastern Shore							
PR_ES010000	Eastern Shore Infrastructure Improvements - Interim Plant Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_ES010100	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_ES010200	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase II	\$ 1,000	\$ 3,000	\$ 4,000	\$ -	\$ -	\$ -
	Subtotal	\$ 1,000	\$ 3,000	\$ 4,000	\$ -	\$ -	\$ -

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	Total				
		FY-21 to FY-30	FY-21	FY-22	FY-23	FY-24
James River						
PR_JR010600	Lucas Creek Pump Station Upgrade	\$ 6,215	\$ 303	\$ 2,706	\$ 2,950	\$ 256
PR_JR011300	Patrick Henry Pump Station Interconnection Force Main	\$ 1,262	\$ 1,262	\$ -	\$ -	\$ -
PR_JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ 11,598	\$ 9,933	\$ 1,665	\$ -	\$ -
PR_JR012100	Huxley to Middle Ground Force Main Extension	\$ 1,847	\$ 1,845	\$ 2	\$ -	\$ -
PR_JR013000	Morrison Pump Station Discharge Force Main Replacement & Ca	\$ 1,405	\$ 1,077	\$ 328	\$ -	\$ -
PR_JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement P	\$ 2,211	\$ 36	\$ 406	\$ 1,512	\$ 257
PR_JR013400	James River Treatment Plant Advanced Nutrient Reduction Imprc	\$ 160,338	\$ 2,108	\$ 14,376	\$ 58,284	\$ 64,918
	Subtotal	\$ 184,876	\$ 16,564	\$ 19,483	\$ 62,746	\$ 65,431
Middle Peninsula						
PR_MP011700	Middle Peninsula Interceptor Systems Pump Station Control and	\$ 2,689	\$ 500	\$ 500	\$ 500	\$ 689
PR_MP012000	King William Treatment Plant Improvements Phase I	\$ 2,001	\$ 1,996	\$ 5	\$ -	\$ -
PR_MP012400	West Point Treatment Plant Tertiary Filter	\$ 357	\$ 357	\$ -	\$ -	\$ -
PR_MP012500	Mathews Main Vacuum Pump Station Replacement	\$ 5	\$ 5	\$ -	\$ -	\$ -
PR_MP013000	Small Communities Collection System Rehabilitation Phase I	\$ 15	\$ 15	\$ -	\$ -	\$ -
PR_MP013020	Small Communities Collection System Rehabilitation Phase III	\$ 709	\$ 704	\$ 5	\$ -	\$ -
PR_MP013100	Small Communities Mobile Dewatering Facilities Installation	\$ 849	\$ 849	\$ -	\$ -	\$ -
PR_MP013300	King William Treatment Plant Improvements Phase II	\$ 13,996	\$ 492	\$ 439	\$ 6,520	\$ 6,520
PR_MP013400	Small Communities Operation Center Parking and Laydown Area	\$ 400	\$ 400	\$ -	\$ -	\$ -
PR_MP013500	Middlesex Collection System-Cooks Corner	\$ 1,021	\$ 1,021	\$ -	\$ -	\$ -
PR_MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ 1,340	\$ 1,340	\$ -	\$ -	\$ -
PR_MP013700	Middlesex Interceptor System Program Phase II-Urbanna to Mat	\$ 26,206	\$ 1,097	\$ 1,043	\$ 12,021	\$ 12,021
PR_MP013800	Middlesex Interceptor System Program Phase III	\$ 5,510	\$ -	\$ 139	\$ 370	\$ 3,749
PR_MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ 250	\$ 250	\$ -	\$ -	\$ -
PR_MP014100	Middlesex Collection System-Christ's Church Service Area	\$ 1,017	\$ 73	\$ 173	\$ 575	\$ 197
PR_MP014200	Middlesex Collection System-Topping Service Area	\$ 5,578	\$ -	\$ 201	\$ 269	\$ 683
PR_MP014300	Middlesex Collection System-Locust Hill Service Area	\$ 3,515	\$ 253	\$ 477	\$ 1,511	\$ 1,269
PR_MP014400	Middlesex Collection System-Hartfield Service Area	\$ 4,086	\$ 295	\$ 553	\$ 1,758	\$ 1,475
PR_MP014500	Middlesex Collection System-Saluda Service Area	\$ 4,092	\$ 295	\$ 554	\$ 1,761	\$ 1,478
PR_MP014600	Middlesex Collection System-Deltaville Service Area	\$ 27,905	\$ -	\$ -	\$ -	\$ -
PR_MP014700	Small Communities Rehabilitation Phase IV	\$ 705	\$ 82	\$ 623	\$ -	\$ -
PR_MP014800	Small Communities Rehabilitation Phase V	\$ 411	\$ -	\$ 52	\$ 358	\$ -
PR_MP014900	Middle Peninsula Operations Center Locker Room and Administr	\$ 600	\$ 60	\$ 540	\$ -	\$ -
PR_MP015000	Sharon Road Gravity Sewer Improvements	\$ 351	\$ 101	\$ 250	\$ -	\$ -
PR_MP015100	West Point Pump Station 4 (Thompson Avenue) Rehabilitation	\$ 771	\$ 95	\$ 671	\$ 5	\$ -
PR_MP015200	West Point Treatment Plant Improvements (2021)	\$ 30,250	\$ -	\$ 563	\$ 2,271	\$ 8,292
	Subtotal	\$ 106,723	\$ 10,279	\$ 6,787	\$ 27,918	\$ 36,372
Nansemond						
PR_NP010620	Suffolk Pump Station Replacement	\$ 15,368	\$ 4,521	\$ 10,013	\$ 834	\$ -
PR_NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replac	\$ 783	\$ 783	\$ -	\$ -	\$ -
PR_NP012400	Western Branch Sewer System Gravity Improvements	\$ 2,838	\$ -	\$ 164	\$ 164	\$ 2,511
PR_NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvemen	\$ 856	\$ 856	\$ -	\$ -	\$ -
PR_NP012600	Deep Creek Interceptor Force Main Replacement	\$ 2,152	\$ 2,152	\$ -	\$ -	\$ -
PR_NP013000	Nansemond Treatment Plant Motor Control Center Replacement	\$ 1,722	\$ 608	\$ 608	\$ 506	\$ -
PR_NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ 857	\$ 857	\$ -	\$ -	\$ -
PR_NP013500	Nansemond Treatment Plant Land Acquisition-Land Stabilization	\$ 2,749	\$ 2,742	\$ 7	\$ -	\$ -
PR_NP013600	Nansemond Treatment Plant Land Acquisition-Structure Demoliti	\$ 662	\$ 662	\$ -	\$ -	\$ -
PR_NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improvem	\$ 8,565	\$ 96	\$ 2,140	\$ 5,059	\$ 1,270
PR_NP013810	Nansemond Treatment Plant Advanced Nutrient Reduction Imprc	\$ 801	\$ 801	\$ -	\$ -	\$ -
PR_NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Imprc	\$ 219,082	\$ 3,764	\$ 2,447	\$ 16,346	\$ 93,184
PR_NP013901	Nansemond Service Area I-I Reduction Phase II (CHES)	\$ 15,539	\$ -	\$ -	\$ -	\$ -
PR_NP013902	Nansemond Service Area I-I Reduction Phase III (CHES)	\$ 15,464	\$ -	\$ -	\$ -	\$ -
PR_NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-4	\$ 16,216	\$ 955	\$ 959	\$ 7,529	\$ 6,774
PR_NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ 2,941	\$ -	\$ -	\$ -	\$ -
PR_NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ 2,759	\$ 2,749	\$ 10	\$ -	\$ -
PR_NP014500	Nansemond Treatment Plant Regional Residuals Facility Upgrad	\$ 1,770	\$ 234	\$ 1,536	\$ -	\$ -
PR_NP014600	West Road Interceptor Force Main Extension	\$ 6,042	\$ 318	\$ 3,578	\$ 2,147	\$ -
	Subtotal	\$ 317,153	\$ 22,097	\$ 21,460	\$ 32,584	\$ 103,738
Surry						
PR_SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ 29,722	\$ 15,507	\$ 14,215	\$ -	\$ -
PR_SU010300	Surry Water and Sewer Infrastructure Improvements - Phase 1	\$ 1,901	\$ 992	\$ 908	\$ -	\$ -
	Subtotal	\$ 31,623	\$ 16,499	\$ 15,123	\$ -	\$ -
Virginia Initiative Plant						
PR_VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement P	\$ 1,816	\$ 120	\$ 93	\$ 892	\$ 711
PR_VP014010	Ferebee Avenue Pump Station Replacement	\$ 6,343	\$ 138	\$ -	\$ 2,387	\$ 3,524
PR_VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 I	\$ 8,805	\$ 570	\$ 2,954	\$ 3,514	\$ 1,767
PR_VP014700	Ingleside Road Pump Station Replacement	\$ 3,070	\$ 1,158	\$ 1,913	\$ -	\$ -
PR_VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ 1,608	\$ -	\$ 215	\$ 1,393	\$ -
PR_VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 33,384	\$ 2,665	\$ 2,798	\$ 3,992	\$ 8,954
PR_VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ 16,222	\$ 1,898	\$ 4,817	\$ 5,704	\$ 3,803
PR_VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ 1,805	\$ 82	\$ 62	\$ 922	\$ 738
PR_VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement P	\$ 2,520	\$ 101	\$ 77	\$ 1,301	\$ 1,041
PR_VP017110	Central Norfolk Area Gravity Sewer Improvements Phase I	\$ 110	\$ 110	\$ -	\$ -	\$ -
PR_VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II	\$ 2,579	\$ -	\$ 50	\$ 215	\$ 1,086
PR_VP018000	Park Avenue Pump Station Replacement	\$ 7,443	\$ 367	\$ 4,043	\$ 3,033	\$ -
PR_VP018200	Effingham Interceptor Vault Removal	\$ 2,081	\$ 1,122	\$ 959	\$ -	\$ -
PR_VP018301	VIP Service Area I-I Reduction Phase I (PORTS)	\$ 12,659	\$ 1,096	\$ 1,546	\$ 5,713	\$ 4,305
PR_VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ 10,320	\$ -	\$ -	\$ -	\$ -
PR_VP018303	VIP Service Area I-I Reduction Phase III (PORTS)	\$ 9,090	\$ 1,000	\$ 1,087	\$ 3,990	\$ 3,012
PR_VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ 5,371	\$ -	\$ -	\$ -	\$ -
PR_VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ 2,569	\$ -	\$ -	\$ -	\$ -
PR_VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-	\$ 17,555	\$ -	\$ -	\$ -	\$ -
PR_VP018500	Elizabeth River Crossing Reliability Improvements	\$ 1,043	\$ 793	\$ 250	\$ -	\$ -

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	FY-25	FY-26	FY-27	FY-28	FY-29	FY-30
James River							
PR_JR010600	Lucas Creek Pump Station Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR011300	Patrick Henry Pump Station Interconnection Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR012100	Huxley to Middle Ground Force Main Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR013000	Morrison Pump Station Discharge Force Main Replacement & Ca	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_JR013400	James River Treatment Plant Advanced Nutrient Reduction Impr	\$ 20,652	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 20,652	\$ -	\$ -	\$ -	\$ -	\$ -
Middle Peninsula							
PR_MP011700	Middle Peninsula Interceptor Systems Pump Station Control and	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP012000	King William Treatment Plant Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP012400	West Point Treatment Plant Tertiary Filter	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP012500	Mathews Main Vacuum Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013000	Small Communities Collection System Rehabilitation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013020	Small Communities Collection System Rehabilitation Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013100	Small Communities Mobile Dewatering Facilities Installation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013300	King William Treatment Plant Improvements Phase II	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013400	Small Communities Operation Center Parking and Laydown Area	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013500	Middlesex Collection System-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013700	Middlesex Interceptor System Program Phase II-Urbanna to Mat	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013800	Middlesex Interceptor System Program Phase III	\$ 1,253	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014100	Middlesex Collection System-Christ's Church Service Area	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014200	Middlesex Collection System-Topping Service Area	\$ 2,405	\$ 2,014	\$ 5	\$ -	\$ -	\$ -
PR_MP014300	Middlesex Collection System-Locust Hill Service Area	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014400	Middlesex Collection System-Hartfield Service Area	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014500	Middlesex Collection System-Saluda Service Area	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014600	Middlesex Collection System-Deltaville Service Area	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014700	Small Communities Rehabilitation Phase IV	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014800	Small Communities Rehabilitation Phase V	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP014900	Middle Peninsula Operations Center Locker Room and Administr	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP015000	Sharon Road Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP015100	West Point Pump Station 4 (Thompson Avenue) Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_MP015200	West Point Treatment Plant Improvements (2021)	\$ 13,500	\$ 5,625	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 17,723	\$ 7,639	\$ 5	\$ -	\$ -	\$ -
Nansemond							
PR_NP010620	Suffolk Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replac	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP012400	Western Branch Sewer System Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvemen	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP012600	Deep Creek Interceptor Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013000	Nansemond Treatment Plant Motor Control Center Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013500	Nansemond Treatment Plant Land Acquisition-Land Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013600	Nansemond Treatment Plant Land Acquisition-Structure Demoliti	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improven	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013810	Nansemond Treatment Plant Advanced Nutrient Reduction Imprc	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Imprc	\$ 88,121	\$ 15,220	\$ -	\$ -	\$ -	\$ -
PR_NP013901	Nansemond Service Area I-I Reduction Phase II (CHES)	\$ 257	\$ 1,569	\$ 2,902	\$ 8,093	\$ 2,718	\$ -
PR_NP013902	Nansemond Service Area I-I Reduction Phase III (CHES)	\$ -	\$ 1,349	\$ 1,850	\$ 8,163	\$ 4,082	\$ 8
PR_NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ -	\$ -	\$ 205	\$ 620	\$ 2,117	\$ -
PR_NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP014500	Nansemond Treatment Plant Regional Residuals Facility Upgrad	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_NP014600	West Road Interceptor Force Main Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 88,378	\$ 18,138	\$ 4,957	\$ 16,876	\$ 8,916	\$ 8
Surry							
PR_SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_SU010300	Surry Water and Sewer Infrastructure Improvements - Phase 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Virginia Initiative Plant							
PR_VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP014010	Ferebee Avenue Pump Station Replacement	\$ 294	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP014700	Ingleside Road Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 8,954	\$ 6,020	\$ -	\$ -	\$ -	\$ -
PR_VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP017110	Central Norfolk Area Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II	\$ 1,229	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018000	Park Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018200	Effingham Interceptor Vault Removal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018301	VIP Service Area I-I Reduction Phase I (PORTS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ -	\$ 283	\$ 747	\$ 6,057	\$ 3,233	\$ -
PR_VP018303	VIP Service Area I-I Reduction Phase III (PORTS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ -	\$ 207	\$ 249	\$ 2,054	\$ 2,861	\$ -
PR_VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ -	\$ 44	\$ 237	\$ 1,644	\$ 644	\$ -
PR_VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-	\$ -	\$ -	\$ 557	\$ 639	\$ 4,068	\$ 9,199
PR_VP018500	Elizabeth River Crossing Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	Total				
		FY-21 to FY-30	FY-21	FY-22	FY-23	FY-24
PR_VP018800	Virginia Initiative Plant Administration Building Renovation	\$ 1,862	\$ 386	\$ 1,476	\$ -	\$ -
PR_VP018900	Norchester Pump Station Screening Improvements	\$ 460	\$ 88	\$ 290	\$ 83	\$ -
	Subtotal	\$ 145,625	\$ 11,694	\$ 22,628	\$ 33,141	\$ 28,942

**HAMPTON ROADS SANITATION DISTRICT
 CAPITAL IMPROVEMENT PROGRAM
 FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	FY-25	FY-26	FY-27	FY-28	FY-29	FY-30
PR_VP018800	Virginia Initiative Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_VP018900	Norchester Pump Station Screening Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 10,477	\$ 6,553	\$ 1,790	\$ 10,395	\$ 10,806	\$ 9,199

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	Total				
		FY-21 to FY-30	FY-21	FY-22	FY-23	FY-24
Williamsburg						
PR_WB012400	Williamsburg Treatment Plant Generator and Switchgear Replace	\$ 8,972	\$ 8,972	\$ -	\$ -	\$ -
PR_WB012500	Lodge Road Pump Station Upgrades	\$ 1,534	\$ 159	\$ 537	\$ 839	\$ -
PR_WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehab	\$ 3,443	\$ 3,086	\$ 357	\$ -	\$ -
PR_WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ 1,114	\$ 406	\$ 708	\$ -	\$ -
	Subtotal	\$ 15,063	\$ 12,622	\$ 1,602	\$ 839	\$ -
York River						
PR_YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and W	\$ 3,178	\$ -	\$ 231	\$ 1,528	\$ 1,418
PR_YR010520	Magruder Mercury Interceptor Force Main Replacement - Section	\$ 4,301	\$ 40	\$ 322	\$ 1,438	\$ 2,498
PR_YR010530	Magruder Mercury Interceptor Force Main Replacement - Section	\$ 5,693	\$ -	\$ 33	\$ 59	\$ 518
PR_YR010900	Tabb Pressure Reducing Station and Offline Storage Facility	\$ 11,602	\$ 566	\$ 2,031	\$ 6,000	\$ 3,005
PR_YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ 399	\$ 399	\$ -	\$ -	\$ -
PR_YR013600	York River Treatment Plant Solids Handling Electrical Improve	\$ 5	\$ 5	\$ -	\$ -	\$ -
PR_YR013710	York River Treatment Plant Advanced Nutrient Reduction Improv	\$ 643	\$ 643	\$ -	\$ -	\$ -
PR_YR013900	York River System Isolation Valve Installation and Replacement	\$ 1,773	\$ 1,474	\$ 299	\$ -	\$ -
PR_YR014000	York River Treatment Plant Administration Building Renovation	\$ 1,149	\$ 109	\$ 1,040	\$ -	\$ -
PR_YR014100	Coliseum Pressure Reducing Station Enhanced Storage	\$ 8,078	\$ 204	\$ -	\$ -	\$ 548
PR_YR014200	LaSalle Avenue Boat Harbor to York River Interconnect Force Ma	\$ 6,974	\$ 203	\$ -	\$ 90	\$ 456
PR_YR014300	Bethel-Poquoson Force Main Phase II (Wythe Creek Road) Repl	\$ 2,700	\$ 1,314	\$ 1,386	\$ -	\$ -
	Subtotal	\$ 46,496	\$ 4,958	\$ 5,343	\$ 9,115	\$ 8,444
General						
PR_GN010730	Horizontal Valve Replacement Phase III	\$ 1,101	\$ 82	\$ 88	\$ 260	\$ 260
PR_GN011700	Pump Station Generators and Standby Pump Upgrades	\$ 3,091	\$ 3,091	\$ -	\$ -	\$ -
PR_GN012130	Manhole Rehabilitation-Replacement Phase I and North Shore S	\$ 5,721	\$ 5,721	\$ -	\$ -	\$ -
PR_GN013300	Treatment Plant Grease Handling Facilities	\$ 8,120	\$ 4,507	\$ 3,613	\$ -	\$ -
PR_GN014900	North Shore Gravity Sewer Improvements Phase I	\$ 4,377	\$ 288	\$ 2,551	\$ 1,538	\$ -
PR_GN015000	South Shore Gravity Sewer Improvements Phase I	\$ 767	\$ 39	\$ 68	\$ 247	\$ 413
PR_GN015300	Interceptor System Valve Improvements Phase I	\$ 2,673	\$ 157	\$ 138	\$ 884	\$ 1,280
PR_GN015400	South Shore Aerial Crossing Improvements	\$ 269	\$ 15	\$ 11	\$ 125	\$ 119
PR_GN015800	North Shore Automated Diversion Facilities	\$ 1,394	\$ 223	\$ 1,170	\$ -	\$ -
PR_GN016310	Integrated Planning of SWIFT	\$ 5,073	\$ 903	\$ 900	\$ 903	\$ 905
PR_GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ 1,095	\$ 570	\$ 175	\$ 175	\$ 175
PR_GN016320	Program Management of SWIFT Full Scale Implementation	\$ 69,679	\$ 5,360	\$ 5,360	\$ 5,360	\$ 5,360
PR_GN016341	VIP SWIFT Land Acquisition	\$ 15,000	\$ -	\$ -	\$ 15,000	\$ -
PR_GN016342	Williamsburg SWIFT Land Acquisition	\$ 1,498	\$ -	\$ -	\$ -	\$ -
PR_GN016344	James River Land Improvements	\$ 2,031	\$ 31	\$ -	\$ 1,000	\$ -
PR_GN016350	Williamsburg SWIFT Facility	\$ 122,180	\$ -	\$ -	\$ -	\$ -
PR_GN016351	Williamsburg Recharge Wells	\$ 24,444	\$ -	\$ -	\$ -	\$ -
PR_GN016360	James River SWIFT Facility	\$ 180,858	\$ 1,492	\$ 15,270	\$ 67,252	\$ 73,255
PR_GN016361	James River Recharge Wells	\$ 28,962	\$ 1,263	\$ 2,489	\$ 10,181	\$ 11,529
PR_GN016370	York River SWIFT Facility	\$ 164,412	\$ -	\$ -	\$ 1,992	\$ 995
PR_GN016371	York River Recharge Wells	\$ 27,500	\$ -	\$ -	\$ -	\$ 219
PR_GN016380	Nansemond SWIFT Facility	\$ 287,525	\$ -	\$ 1,964	\$ 3,258	\$ 4,234
PR_GN016381	Nansemond Recharge Wells	\$ 48,888	\$ -	\$ -	\$ -	\$ 764
PR_GN016390	VIP SWIFT Facility	\$ 312,923	\$ -	\$ -	\$ 1,911	\$ 3,595
PR_GN016391	VIP Recharge Wells	\$ 73,332	\$ -	\$ 50	\$ 818	\$ 665
PR_GN016392	VIP SWIFT Site Work	\$ 38,891	\$ -	\$ -	\$ 356	\$ 1,386
PR_GN016400	Treatment Plant Dewatering Replacement Phase I	\$ 1,522	\$ 1,522	\$ -	\$ -	\$ -
PR_GN016600	South Shore High Point Air Vent Installation Phase I	\$ 270	\$ 270	\$ -	\$ -	\$ -
PR_GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ 5,324	\$ 467	\$ 4,857	\$ -	\$ -
PR_GN017100	Climate Change Planning	\$ 1,983	\$ 1,831	\$ 153	\$ -	\$ -
PR_GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades	\$ 9,005	\$ 3,000	\$ 3,000	\$ 3,005	\$ -
PR_GN017300	Treatment Plant Dewatering Replacement Program	\$ 35,000	\$ -	\$ -	\$ -	\$ 3,889
PR_GN017500	Fleet Management Program	\$ 15,095	\$ -	\$ 1,887	\$ 1,887	\$ 1,887
PR_GN017700	Fleet Management (FY21)	\$ 1,200	\$ 1,200	\$ -	\$ -	\$ -
PR_GN017800	Water Quality Department Instrumentation Equipment (FY21)	\$ 435	\$ 435	\$ -	\$ -	\$ -
PR_GN017900	Solids System Improvements for Army Base MHI Offline	\$ 3,800	\$ 2,436	\$ 1,364	\$ -	\$ -
PR_GN018000	Inflow Reduction Program - Phase I	\$ 2,000	\$ 531	\$ 375	\$ 375	\$ 375
	Subtotal	\$ 1,366,723	\$ 35,432	\$ 45,482	\$ 116,527	\$ 111,304
Future Improvements						
PR_IP011000	Advanced Treatment Infrastructure Upgrades	\$ 59,473	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 59,473	\$ -	\$ -	\$ -	\$ -
CIP TOTALS		\$ 2,793,403	\$ 235,000	\$ 210,784	\$ 338,095	\$ 442,857

**HAMPTON ROADS SANITATION DISTRICT
CAPITAL IMPROVEMENT PROGRAM
FY-2021 TO FY-2030 CASH FLOW PROJECTION (\$,000)**

CIP No	Project Name	FY-25	FY-26	FY-27	FY-28	FY-29	FY-30
Williamsburg							
PR_WB012400	Williamsburg Treatment Plant Generator and Switchgear Replace	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_WB012500	Lodge Road Pump Station Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehab	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
York River							
PR_YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and W	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR010520	Magruder Mercury Interceptor Force Main Replacement - Section	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR010530	Magruder Mercury Interceptor Force Main Replacement - Section	\$ 1,630	\$ 2,437	\$ 1,016	\$ -	\$ -	\$ -
PR_YR010900	Tabb Pressure Reducing Station and Offline Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR013600	York River Treatment Plant Solids Handling Electrical Improve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR013710	York River Treatment Plant Advanced Nutrient Reduction Improv	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR013900	York River System Isolation Valve Installation and Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR014000	York River Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_YR014100	Coliseum Pressure Reducing Station Enhanced Storage	\$ 5,856	\$ 1,469	\$ -	\$ -	\$ -	\$ -
PR_YR014200	LaSalle Avenue Boat Harbor to York River Interconnect Force Ma	\$ 4,665	\$ 1,560	\$ -	\$ -	\$ -	\$ -
PR_YR014300	Bethel-Poquoson Force Main Phase II (Wythe Creek Road) Repl	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 12,154	\$ 5,466	\$ 1,016	\$ -	\$ -	\$ -
General							
PR_GN010730	Horizontal Valve Replacement Phase III	\$ 260	\$ 152	\$ -	\$ -	\$ -	\$ -
PR_GN011700	Pump Station Generators and Standby Pump Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN012130	Manhole Rehabilitation-Replacement Phase I and North Shore S	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN013300	Treatment Plant Grease Handling Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN014900	North Shore Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN015000	South Shore Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN015300	Interceptor System Valve Improvements Phase I	\$ 213	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN015400	South Shore Aerial Crossing Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN015800	North Shore Automated Diversion Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016310	Integrated Planning of SWIFT	\$ 900	\$ 505	\$ 1	\$ -	\$ -	\$ -
PR_GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016320	Program Management of SWIFT Full Scale Implementation	\$ 5,360	\$ 5,360	\$ 5,360	\$ 5,360	\$ 5,360	\$ 5,360
PR_GN016341	VIP SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016342	Williamsburg SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ 1,498	\$ -	\$ -
PR_GN016344	James River Land Improvements	\$ 518	\$ 482	\$ -	\$ -	\$ -	\$ -
PR_GN016350	Williamsburg SWIFT Facility	\$ -	\$ -	\$ -	\$ 2,215	\$ 2,034	\$ 24,427
PR_GN016351	Williamsburg Recharge Wells	\$ -	\$ -	\$ -	\$ -	\$ 292	\$ 856
PR_GN016360	James River SWIFT Facility	\$ 23,590	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016361	James River Recharge Wells	\$ 3,250	\$ 250	\$ -	\$ -	\$ -	\$ -
PR_GN016370	York River SWIFT Facility	\$ 5,206	\$ 78,426	\$ 73,552	\$ 4,241	\$ -	\$ -
PR_GN016371	York River Recharge Wells	\$ 1,063	\$ 13,696	\$ 12,522	\$ -	\$ -	\$ -
PR_GN016380	Nansemond SWIFT Facility	\$ 7,045	\$ 44,561	\$ 76,659	\$ 80,863	\$ 55,727	\$ 13,214
PR_GN016381	Nansemond Recharge Wells	\$ 1,390	\$ 1,717	\$ 20,536	\$ 22,571	\$ 1,910	\$ -
PR_GN016390	VIP SWIFT Facility	\$ 2,651	\$ 6,026	\$ 97,367	\$ 95,340	\$ 55,502	\$ 50,531
PR_GN016391	VIP Recharge Wells	\$ 1,887	\$ 2,787	\$ 16,073	\$ 32,276	\$ 15,990	\$ 2,786
PR_GN016392	VIP SWIFT Site Work	\$ 8,289	\$ 28,860	\$ -	\$ -	\$ -	\$ -
PR_GN016400	Treatment Plant Dewatering Replacement Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016600	South Shore High Point Air Vent Installation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN017100	Climate Change Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN017300	Treatment Plant Dewatering Replacement Program	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889
PR_GN017500	Fleet Management Program	\$ 1,887	\$ 1,887	\$ 1,887	\$ 1,887	\$ 1,887	\$ -
PR_GN017700	Fleet Management (FY21)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN017800	Water Quality Department Instrumentation Equipment (FY21)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN017900	Solids System Improvements for Army Base MHI Offline	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PR_GN018000	Inflow Reduction Program - Phase I	\$ 344	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 67,741	\$ 188,597	\$ 307,846	\$ 250,139	\$ 142,591	\$ 101,063
Future Improvements							
PR_IP011000	Advanced Treatment Infrastructure Upgrades	\$ -	\$ -	\$ -	\$ -	\$ 9,214	\$ 50,259
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ 9,214	\$ 50,259
	CIP TOTALS	\$ 323,810	\$ 247,619	\$ 333,333	\$ 280,952	\$ 190,476	\$ 190,476

Rate Schedules

WASTEWATER TREATMENT RATE SCHEDULE

<u>Service</u>		<u>FY-2021</u>	<u>FY-2020</u>
Flow (monthly basis)			
Per CCF *		\$ 5.86	\$ 5.86
Minimum charge (per day)		0.30	0.30
Surcharge, per milligrams/liter per CCF	<u>In Excess of</u>		
Biochemical Oxygen Demand (BOD)	282 mg/L	\$ 0.000129	\$ 0.000129
Total Suspended Solids (TSS)	261 mg/L	0.000630	0.000630
Total Phosphorus (TP)	6 mg/L	0.009871	0.009871
Total Kjeldahl Nitrogen (TKN)	47 mg/L	0.003378	0.003378
Surcharge, per 100 pounds			
BOD	282 mg/L	\$ 2.07	\$ 2.07
TSS	261 mg/L	10.08	10.08
TP	6 mg/L	158.12	158.12
TKN	47 mg/L	54.11	54.11
Septic, per gallon		\$ 0.1717	\$ 0.1717
Residential flat rate (per 30-day period)		\$ 48.64	\$ 48.64

* CCF = 100 Cubic Feet (approximately 748 gallons)

VOLUME BASED FACILITY RATE SCHEDULE

<u>Meter Size</u>	<u>FY-2021</u>	<u>FY-2020</u>
5/8 Inch	\$ 1,905	\$ 1,905
3/4 Inch	4,210	4,210
1 Inch	7,410	7,410
1 1/2 Inch	16,645	16,645
2 Inch	30,505	30,505
3 Inch	73,810	73,810
4 Inch	138,445	138,445
6 Inch	336,960	336,960
8 Inch	634,710	634,710
10 Inch	1,038,525	1,038,525
12 Inch	1,554,120	1,554,120
14 Inch	2,186,505	2,186,505
16 Inch	2,940,135	2,940,135

SMALL COMMUNITIES RATE SCHEDULE

<u>Flow (monthly basis)</u>	<u>FY-2021</u>	<u>FY-2020</u>
Per 1,000 gallons		
King William	\$ 13.82	\$ 13.82
Mathews	13.43	13.43
Surry	13.43	13.43
Urbanna	13.43	15.48
West Point	13.62	15.71
Residential flat rate (per 30-day period)		
King William	\$ 55.28	\$ 55.28
Mathews	53.72	53.72
Surry	53.72	53.72
Urbanna	53.72	61.92
West Point	54.48	62.84

FEES

	<u>FY-2021</u>	<u>FY-2020</u>
Damaged lock	\$ 100	\$ 100
Service restoration	100	100
Meter reading (customer-owned meter)	75	75
Inaccessible meter	50	50
Access card replacement	25	25
Returned payments	25	25
Delinquency service trip	15	15
Account documentation	10	10
Deduction meter	2	2