



Annual Budget

Fiscal Year 2020
(July 1, 2019 - June 30, 2020)



HRSD Annual Budget For
Fiscal Year 2020
(July 1, 2019 – June 30, 2020)

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Introduction



General Manager's Introduction

The voters of Virginia took the bold step in 1940 to address pollution in the Hampton Roads by approving a referendum creating the Hampton Roads Sanitation District (HRSD). That public approval capped a 15-year grassroots campaign that began when the shell-fishing beds in the Hampton Roads were closed by the Virginia Department of Health. At the time, over 30 million gallons of untreated sewage was being dumped into the waters of the Hampton Roads each day. It would take the United States Congress another 32 years to tackle the issue of water pollution on a national scale, finally passing the Clean Water Act in 1972.

Over the past 79 years, HRSD has developed into one of the premier wastewater treatment organizations in the nation. With 18 treatment facilities capable of treating 249 million gallons of wastewater each day, HRSD has eliminated the discharge of untreated sewage into the waters of Hampton Roads from the homes and businesses within our region. However, there is more work to be done to further improve water quality as well as preserve our 79-year investment in wastewater infrastructure.

The Governor-appointed, eight-member HRSD Commission approved this Fiscal Year 2020 budget at its regular meeting on May 28, 2019. The Commission and the HRSD staff worked diligently to balance our focus on stewardship of our ratepayers' hard earned dollars with our mission of stewardship of the waters of the Hampton Roads. The cost of wastewater treatment continues to rise here, as it does across the nation. However, wastewater treatment is still a bargain in Hampton Roads, with the typical household paying about \$1 per day for this essential service, protecting public health and our treasured local waterways.

Federal Mandates Drive HRSD Spending

The regional sewer system, although never designed to handle storm water, fills with rainwater runoff, ground water and tidal water during larger storms. At times, the regional system fills beyond capacity and overflows onto local streets. While these occasional overflows have minimal impact on water quality, the U.S. Environmental Protection Agency has made minimizing these types of events a national priority, and HRSD is under a Federal mandate to invest nearly \$2 billion (equaling more than \$4,200 per HRSD customer account) to further reduce the number and volume of overflows from the regional sewer system. In response to this mandate, HRSD is working throughout the region, in partnership with the local governments we serve, to minimize the impact of storm events on the regional sewer system and the waterways we value so greatly.

The Federally mandated requirement to reduce the amount of nutrients that HRSD's treatment plants discharge into the Chesapeake Bay has also required a significant investment in infrastructure and process improvements. The investments by HRSD along with all of Virginia's wastewater treatment plants in the Bay watershed have resulted in Virginia meeting the 2025 goal for nutrient reductions from wastewater treatment plants a full seven years ahead of the 2025 target date ([Chesapeake Bay Foundation's 2017 Virginia Midpoint Assessment](#)). Unfortunately, the agricultural and stormwater required reductions in Virginia are lagging behind, and Virginia is looking to require further expensive reductions from wastewater treatment facilities to compensate for the lack of progress with these other major nutrient sources.

Pursuing Innovative Solutions to Reduce Costs and Protect Water Quality

HRSD continues to lead international research efforts to reduce the cost of removing nutrients from wastewater. HRSD's research work is leveraged through partnerships with leading universities and other

innovative wastewater utilities throughout the world. Putting the knowledge gained into practice has already yielded a significant return on our investment by reducing operational costs for nutrient removal as well as minimizing the capital investment required to construct new systems. A recent estimate of the value of this research found that implementation of these practices has kept energy and chemical costs from rising nearly \$40 million over the past 10 years.

Throughout HRSD's history, changing regulations have required development and implementation of innovative solutions to meet new standards to protect and restore the quality of the waters of Hampton Roads. Treatment processes have progressed from primary, to secondary, to our current advanced nutrient removal processes. Each regulatory change has required significant investment in new treatment processes. Under current regulations, the treated water HRSD discharges to area waterways is nearly clean enough to drink and substantially cleaner than the waterways themselves. With the addition of a few more treatment processes, HRSD can produce water that exceeds drinking water standards, likely to be the ultimate regulatory mandate at some point in the future.

With the various water-related challenges facing Hampton Roads and the Commonwealth, it appears there could be significant benefit from HRSD investing in additional treatment processes to treat water to meet drinking water standards as soon as possible, even before that becomes a regulatory requirement. The challenges of restoring the Chesapeake Bay, the depletion of our groundwater reserves, the impact of sea level rise and the threat of salt-water contamination of coastal groundwater may all be addressed with HRSD's Sustainable Water Initiative for Tomorrow (SWIFT). The concept is for HRSD to treat water to meet drinking water standards and use it to recharge the groundwater aquifer, providing a sustainable source of groundwater, slowing the rate of land subsidence due to over withdrawal of the groundwater, blocking salt water intrusion with a pressurized fresh water barrier and practically eliminating HRSD nutrient discharges to the York, James and Elizabeth Rivers. The benefits of SWIFT are significant and are needed immediately.

Financing a Sustainable Water Future

HRSD is pursuing SWIFT with a goal of obtaining required approvals to construct full-scale facilities beginning in 2020. The SWIFT Research Center began operations in May 2018 and has already recharged the aquifer with over 100 million gallons of SWIFT Water, wastewater treated to meet drinking water standards. HRSD is committed to full scale implementation of this initiative only if it can be accomplished within the financial framework laid out in the Financial Forecast as presented in this budget. In a rare bipartisan move, Congress passed [H.R. 7279](#) in December 2018 and signed by the President in January 2019, amending the Federal Water Pollution Control Act ***“to provide for an integrated planning process, to promote green infrastructure, and for other purposes.”*** This new law codifies the integrated planning process HRSD has already been using to prioritize our investments in clean water mandates. Integrated planning provides the ability to defer many of the proposed capital improvements related to reducing system overflows until after SWIFT is complete. HRSD remains committed to eliminating system overflows; however, the impact of those transient events on local water quality is minimal and the benefits nearly unperceivable. In contrast, the positive impact SWIFT will have on local waterways, eastern Virginia and the entire Chesapeake Bay is significant, will be immediately evident and critical to sustaining the vitality and prosperity of Hampton Roads and all of eastern Virginia for generations to come.

Reducing overflows from the regional sewer system and reducing the amount of nutrients discharged by our treatment plants are both driven by regulations with which HRSD must comply. These regulatory mandates consume over 80 percent of the \$2.8 billion 10-year Capital Improvement Plan. It is within that portion of our capital improvement plan that we will reprioritize mandated projects to allow construction of SWIFT, to achieve significantly more environmental benefits without influencing our Financial Forecast.

HRSD finances its capital projects by issuing bonds and using cash on hand. Over the past 10 years, the annual investment in capital projects (debt payments and cash funded) has grown from less than 38 percent of HRSD's total revenue to more than 50 percent with the Fiscal Year 2020 budget. HRSD is investing in the regional wastewater infrastructure to ensure we leave a fully functional system to the next generation. While HRSD continues to focus on making the right investments in Hampton Roads, across the nation the need for investment in all infrastructure continues to grow. The [American Society of Civil Engineers' 2017 Infrastructure Report Card](#) graded the current state of wastewater infrastructure at a D+. The [US Water Alliance's Report, The Economic Benefits of Investing in Water Infrastructure](#), estimates the unmet wastewater investment at over \$82 billion per year. The report highlights the lack of adequate federal investment in wastewater infrastructure, showing the drop in federal investment from 63 percent in 1977 to less than 9 percent in 2016. State, regional and local governments have had to fill that funding gap, passing on significant rate increases as utilities must price service to recover full costs. In Fiscal Year 2020, despite the lack of federal funding and HRSD's significant commitment to maintaining the appropriate level of investment in wastewater infrastructure in Hampton Roads, our average residential customers will see their monthly bills increase by less than 10 cents per day.

The Community's Role

Our ratepayers can help control their costs by helping us control ours. Ensuring storm water runoff from downspouts, area drains and sump pumps is not directed to the sanitary sewer system, and ensuring privately owned service piping is well maintained and leak free will reduce the amount of water in the sewer system. This ultimately lowers our costs to pump and treat the region's wastewater. Collecting fats, oils and grease in a container for disposal in the trash, as opposed to pouring them down the drain, reduces wastewater system maintenance and operating costs. Proper disposal of unused medications (and other substances) prevents them from reaching our treatment plants, which are not designed for removal of such substances. Our ratepayers can make a difference by not flushing unused medications down the sink or the toilet. Every flush counts.

As we reflect on 79 years of protecting public health and the waters of Hampton Roads, we remember the mandate so boldly declared by those environmentally concerned Virginians in 1940. It was their foresight that allows us to enjoy the waters of Hampton Roads today. It will take our continued innovation, investment and foresight to ensure future generations will inherit clean waterways and be able to keep them clean.

Sincerely,

A handwritten signature in black ink, appearing to read "Ted Henifin", followed by a long horizontal flourish.

Ted Henifin, P.E.
General Manager

Principal Officials

May 28, 2019

COMMISSIONERS

Frederick N. Elofson, CPA, Chair

Maurice P. Lynch, PhD, Vice-Chair

Michael E. Glenn

Vishnu K. Lakdawala, PhD

Willie Levenston, Jr.

Stephen C. Rodriguez

Elizabeth A. Taraski, PhD

Molly J. Ward

COMMISSION SECRETARY

Jennifer L. Cascio

SENIOR STAFF

Edward G. Henifin, PE
General Manager

Jay A. Bernas, PE
Director of Finance
and Treasurer

Charles B. Bott, PhD, PE
Director of Water Technology
And Research

Donald C. Corrado
Director of Information
Technology

Steven G. de Mik, CPA
Director of Operations

Paula A. Hogg
Director of Talent Management

Bruce W. Husselbee, PE
Director of Engineering

James J. Pletl, PhD
Director of Water Quality

Leila Rice, APR
Director of Communications

COUNSEL

Kellam, Pickrell, Cox & Anderson, PC
General Counsel

Jones, Blechman, Woltz & Kelly, PC
Associate Counsel

AquaLaw, PLC
Special Counsel

Norton Rose Fulbright US, LLP
Bond Counsel

Key Facts

Service Area and Operations

Date Established	November 5, 1940
Communities Served	18 communities encompassing 3,087 square miles HRSD is a political subdivision of the Commonwealth of Virginia, created for the specific purpose of water pollution abatement in Hampton Roads by providing a system of interceptor mains and wastewater treatment plants.
Population Served	About 1.7 million, nearly one-fifth of Virginia's population, reside in HRSD's service area.

Operation and Facilities

No. of Positions (FY-2020)	847
Miles of Interceptor Systems	542 Miles
Wastewater Treated	145 million gallons per day average
Wastewater Capacity	249 million gallons per day average

Financial Information

Bond Ratings

Ratings Agency	Senior Debt	Subordinate Long-term	Subordinate Short-term
Standard & Poor's	AA+	AA	A-1+
Fitch Ratings	AA+	AA	F1+
Moody's Investors Service	Aa1	Aa2	n/a

Operating Budget (FY-2020)	\$337,805,000
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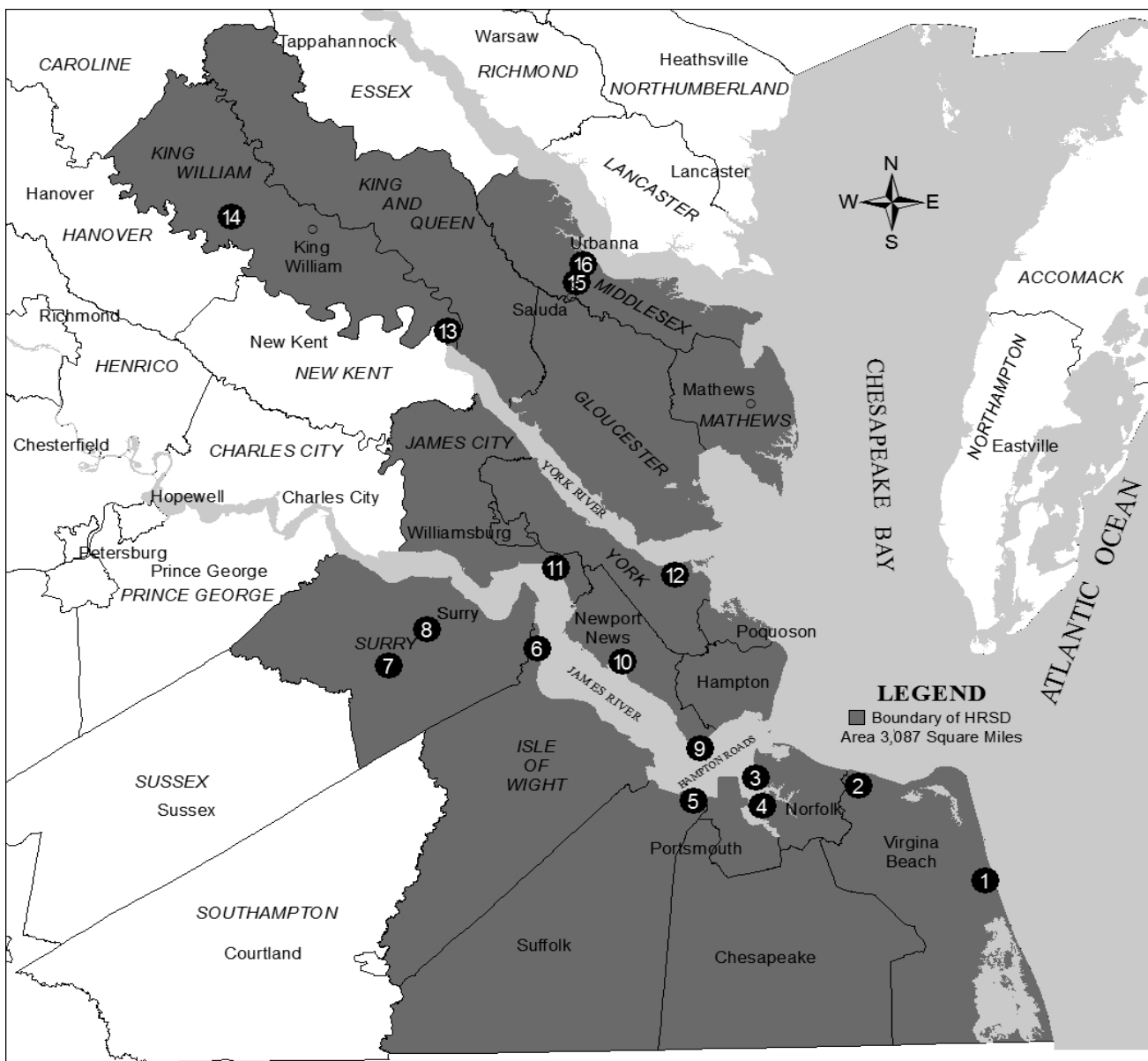
HRSD Service Area

A Political Subdivision of the Commonwealth of Virginia

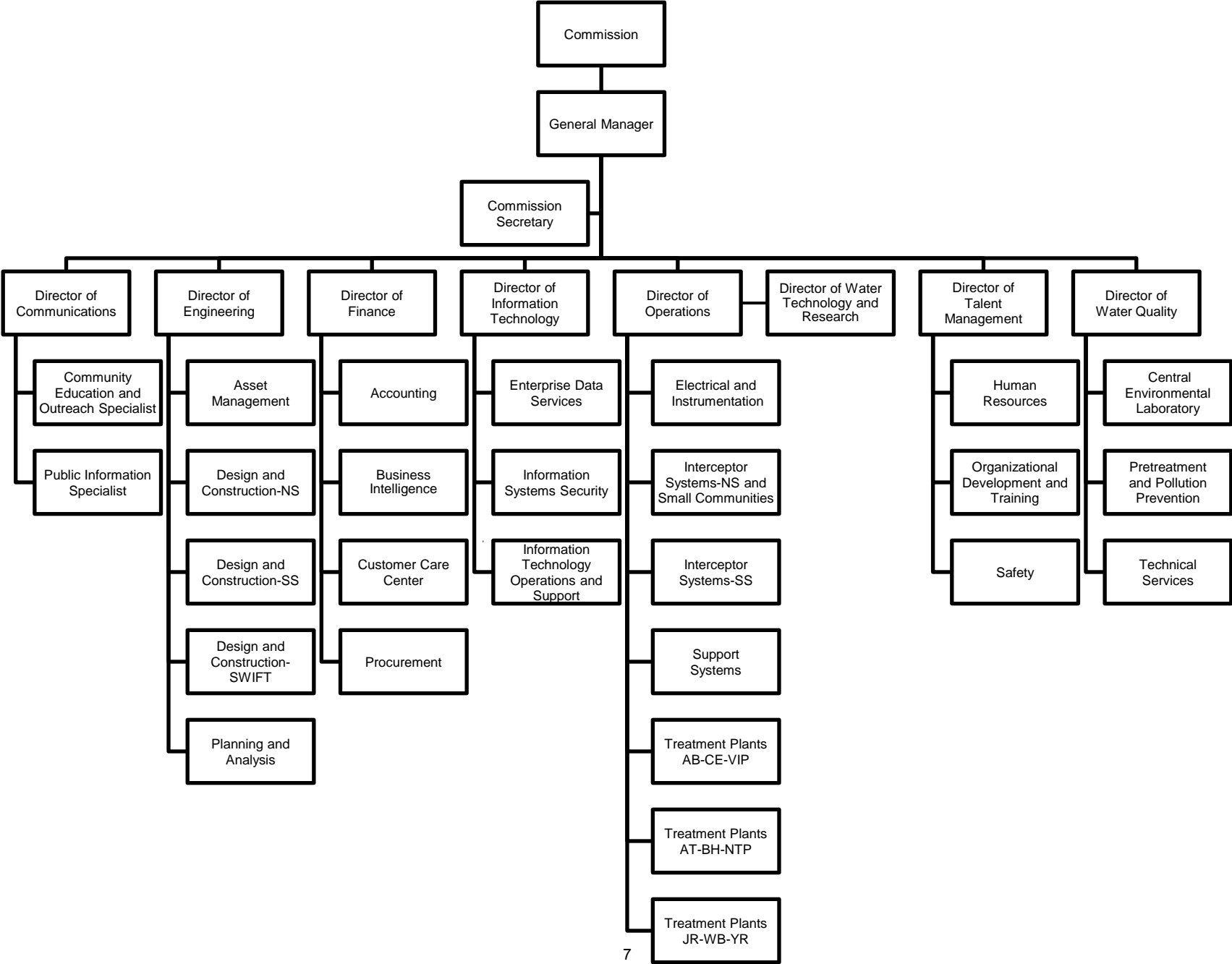
Facilities include the following:

1. Atlantic, Virginia Beach
2. Chesapeake-Elizabeth, Va. Beach
3. Army Base, Norfolk
4. Virginia Initiative, Norfolk
5. Nansemond, Suffolk
6. Lawnes Point, Smithfield
7. County of Surry
8. Town of Surry
9. Boat Harbor, Newport News
10. James River, Newport News
11. Williamsburg, James City County
12. York River, York County
13. West Point, King William County
14. King William, King William County
15. Central Middlesex, Middlesex County
16. Urbanna, Middlesex County

Serving the Cities of
Chesapeake, Hampton,
Newport News, Norfolk,
Poquoson, Portsmouth, Suffolk,
Virginia Beach, Williamsburg and the
Counties of Gloucester,
Isle of Wight, James City,
King and Queen, King William,
Mathews, Middlesex, Surry* and York
*Excluding the Town of Claremont



HRSD Organization Chart
July 1, 2019



History of HRSD

HRSD can trace its beginnings to 1925 when the Virginia Department of Health condemned a large oyster producing area in Hampton Roads. The closure resulted in the Virginia General Assembly creating in 1927 a "Commission to Investigate and Survey the Seafood Industry of Virginia." Other studies recommended a public body to construct and operate a sewage system in the area. HRSD was named after Hampton Roads, a ship anchorage used for five centuries located near the convergence of the James, Elizabeth and Nansemond Rivers, before they flow into the Chesapeake Bay in southeastern Virginia.

In 1934, the Virginia General Assembly created the Hampton Roads Sanitation Disposal Commission with instructions to plan the elimination of pollution in Hampton Roads. Recommendations were made to the General Assembly, which resulted in the Sanitary Districts Law of 1938, along with "an Act to provide for and create the Hampton Roads Sanitation District." This Act required the qualified voters within HRSD to decide in a general election on November 8, 1938, if they favored creation of such a District. This referendum failed to gain a majority by about 500 votes out of nearly 20,000 votes cast. This led to a revision of the Act and another referendum was held on November 5, 1940, which resulted in a majority vote for the creation of the Hampton Roads Sanitation District.

The Enabling Act provides for HRSD to operate as a political subdivision of the Commonwealth of Virginia for the specific purpose of water pollution abatement in Hampton Roads by providing a system of interceptor mains and wastewater treatment plants. Its affairs are controlled by a Commission of eight members appointed by the Governor for four-year terms. Administration is under the direction of a General Manager, supported by department directors and their staffs.

HRSD began operations on July 1, 1946, using facilities acquired from the United States Government. The Warwick County Trunk Sewer, HRSD's first construction project, began on June 26, 1946, and was funded by HRSD's \$6.5 million Primary Pledge Sewer Revenue Bonds, dated March 1, 1946. The first treatment plant, the Army Base Plant, began operation on October 14, 1947. Since that time, the facilities of HRSD have grown to provide sanitary sewer service to all major population centers in southeastern Virginia. The population served has increased from nearly 288,000 in 1940 to about 1.7 million in 2017.

Throughout its rich history HRSD has earned many of its industry's most prestigious awards. This tradition continued as the National Association of Clean Water Agencies (NACWA) presented Peak Performance Awards for outstanding compliance with National Pollutant Discharge Elimination System (NPDES) permits to every HRSD treatment plant during calendar year 2017. The major treatment plants received the following awards in recognition of their outstanding permit compliance status: Atlantic—Gold, Boat Harbor—Platinum (16 consecutive years), Chesapeake-Elizabeth—Silver, James River—Gold, Nansemond—Platinum (16 consecutive years), Virginia Initiative Plant—Platinum (22 consecutive years), Williamsburg—Platinum (23 consecutive years) and York River—Platinum (10 consecutive years). Three treatment plants in the Small Communities Division, Central Middlesex, King William and Urbanna, earned Silver Awards while West Point received a Gold Award.

Highlighting 2018, HRSD's SWIFT (Sustainable Water Initiative for Tomorrow) Program was awarded the U.S. Water Prize for the public sector by the U.S. Water Alliance. HRSD's other honors received in 2018 include the NACWA National Achievement Award - Workforce Development Award for the HRSD Apprenticeship Program and the NACWA National Achievement Award - Operations & Environmental Performance Award for the HRSD Pump Station Architectural Guidelines. HRSD also earned a National Award from the American Council of Engineering Companies (ACEC) for the HRSD Norchester Pump Station. And, HRSD was recognized by the Elizabeth River Project as a Sustained Distinguished Performance Model Level River Stars Business.

Rate Schedules

WASTEWATER TREATMENT RATE SCHEDULE

<u>Service</u>		<u>FY-2020</u>	<u>FY-2019</u>
Flow (monthly basis)			
Per CCF *		\$ 5.86	\$ 5.37
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	\$ 0.000104
Total Suspended Solids (TSS)	261 mg/L	0.000630	0.000592
Total Phosphorus (TP)	6 mg/L	0.009871	0.009535
Total Kjeldahl Nitrogen (TKN)	47 mg/L	0.003378	0.003595
Surcharge, per 100 pounds			
BOD	282 mg/L	\$ 2.07	\$ 1.67
TSS	261 mg/L	10.08	9.49
TP	6 mg/L	158.12	152.74
TKN	47 mg/L	54.11	57.59
Septic, per gallon		\$ 0.1717	\$ 0.1697
Residential flat rate (per 30-day period)		\$ 48.64	\$ 34.91

* CCF = 100 Cubic Feet (approximately 748 gallons)

VOLUME BASED FACILITY RATE SCHEDULE

<u>Meter Size</u>	<u>FY-2020</u>	<u>FY-2019</u>
5/8 Inch	\$ 1,905	\$ 1,895
3/4 Inch	4,210	4,830
1 Inch	7,410	8,170
1 1/2 Inch	16,645	17,260
2 Inch	30,505	30,510
3 Inch	73,810	70,800
4 Inch	138,445	128,660
6 Inch	336,960	298,610
8 Inch	634,710	542,680
10 Inch	1,038,525	862,550
12 Inch	1,554,120	1,259,520
14 Inch	2,186,505	1,734,700
16 Inch	2,940,135	2,289,010

SMALL COMMUNITIES RATE SCHEDULE

	<u>FY-2020</u>	<u>FY-2019</u>
Flow (monthly basis)		
Per 1,000 gallons		
King William	\$ 13.82	\$ 13.25
Mathews	13.43	12.71
Surry	13.43	12.71
Urbanna	15.48	14.84
West Point	15.71	14.95
Residential flat rate (per 30-day period)		
King William	\$ 55.28	\$ 53.00
Mathews	53.72	50.84
Surry	53.72	50.84
Urbanna	61.92	59.36
West Point	62.84	59.80

FEES

	<u>FY-2020</u>	<u>FY-2019</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

Reader's Guide to the Annual Budget

PURPOSE

The Annual Budget is an instrument that sets HRSD's budgetary policy and authorization to raise revenues and spend funds each fiscal year. The development of the Annual Budget is guided by HRSD's mission and vision statements:

- HRSD's mission is to protect public health and the waters of Hampton Roads by treating wastewater effectively.
- HRSD's vision is future generations will inherit clean waterways and be able to keep them clean.

ANNUAL BUDGET OVERVIEW

HRSD's Annual Budget contains the following sections:

Financial Forecast

This section provides a high level, 20-year forecast of projected retail rate increases, operating revenues and expenses, capital improvements and related funding sources, amounts contributed to and fiscal year-end balances of cash and investment reserves, and selected financial ratios that help to measure the financial health of HRSD.

The forecast is an inflationary based model where trends from past fiscal years and proposed operating budgets are used to forecast future operating needs. Transfers to reserves and to the Capital budget are forecast to be in amounts that are not less than parameters established within HRSD's Financial Policy. Debt service for permanent financings are generally forecast to have a maximum term of 30 years at an interest rate that approximates 20-year average fixed rates for HRSD. Interim, or construction, financings' interest rates are based on a 10-year historical average.

Operating Budget

The Operating Budget represents the authorization by the HRSD Commission to spend funds directly related to operating and maintaining HRSD's programs and assets during the fiscal year. This section includes each department's annual operating budgets. Those expenses that are not attributable to a specific department are assigned to "General Expenses." Transfers represent authorization to transfer revenues raised from operations to either the Capital Budget or to various reserves established in HRSD's Financial Policy. The Operating Budget Summary provides the budget by department and major object code classification. Department Budgets and General Expenses, Debt Service and Transfers detail budget expenditures by major object code classification. The number of full-time positions authorized for the fiscal year is provided by department.

Capital Budget

The Capital Budget represents a plan of specific, major capital improvements over a period of ten fiscal years. The Capital Budget is not an approval or appropriation of funds for individual projects. There is no authorization or funding for individual projects until the Commission acts on the specific project. The Commission formally authorizes spending for individual projects throughout a fiscal year and generally upon project initiation.

The Summary Schedule details the funding sources for capital improvements as well as planned expenditures.

A formal, detailed, Capital Improvement Program with more specific project information is available at <https://www.hrsd.com/cip>.

HRSD's budget authorizations, capital improvement plans, user rate setting practices and other significant financial practices are guided by HRSD's Financial Policy. The Financial Policy and Revenue Policy are available at <https://www.hrsd.com/finance>.

HRSD's Rate Schedule is available at <https://www.hrsd.com/finance>.

BUDGETARY PROCESS

HRSD prepares its Annual Budget under the provisions of its enabling legislation and its Trust Agreement, dated March 1, 2008. In accordance with those provisions, the following process is used to adopt the Annual Budget:

The process begins in late December with the issuance of the Annual Budget Instructions by the General Manager. Each department completes its Operating Budget by March 1 for the General Manager's review.

The HRSD Commission appoints a Finance Committee which typically consists of two Commissioners. The committee meets in early April to review the budgets. The Commission reviews these budgets during its April meeting.

The final Annual Budget, which incorporates the Operating and Capital Budgets, is presented at the May Commission meeting for adoption. The Commission simultaneously adopts the budget and any resulting wastewater rate schedule changes. All rate adjustments must be publically advertised four consecutive weeks before they can take effect.

The HRSD Commission approves any budget amendments during the fiscal year.

BUDGETARY ACCOUNTING AND CONTROL

HRSD operates in accordance with annual operating and capital budgets prepared on a basis of accounting that is different from generally accepted accounting principles.

The Operating Budget is adopted by department, with budgetary controls exercised administratively by management at the department level. The General Manager is authorized to transfer funds among departments without further approval by the Commission. Appropriations

lapse at the end of the fiscal year. Valid, outstanding encumbrances (those for which performance under a contract is expected in the next year) are re-appropriated without further approval by the Commission and become part of the subsequent year's budget.

The Capital Budget represents a ten-year plan. Funds for the Capital Budget are adopted throughout a fiscal year on a project basis. Transfers among projects require approval by the Commission. Appropriations for these budgets continue until the purpose of the appropriation has been fulfilled.

Glossary of Financial Terms

Appropriation: An authorization granted by the Commission to incur obligations for specific purposes. Appropriations are usually limited to amount, purpose and time.

Basis of Accounting: HRSD's financial statements report the financial position and results of operations of HRSD in accordance with generally accepted accounting principles in the United States of America (GAAP).

Bond Ratings: A grade given to bonds that represents a measure of their credit quality. Private independent rating services such as Standard & Poor's, Moody's and Fitch provide these evaluations of a bond issuer's financial strength, or its the ability to pay a bond's principal and interest in a timely fashion.

Capital Improvement Program (CIP): Ten-year plan for major non-recurring facility, infrastructure, or acquisition expenditures that expand or improve HRSD and/or community assets. Projects included in the CIP include physical descriptions, implementation schedules, year of expenditure cost and funding source estimates, and an indication of HRSD Commission priorities and community benefits

Centum Cubic Feet (CCF): Typical unit in which industrial-consumption of natural gas or water is measured; each CCF being 100 cubic-feet.

CIP Percent Cash Funded: Percent of each year's capital improvement plan funded with cash through transfers from operations. HRSD's Financial Policy requires that at least 15 percent of each year's planned capital improvements be funded with cash. This ratio indicates the amount of capital improvements that are not leveraged.

Days Cash on Hand: Measured by current and non-current cash and investments, plus any restricted cash and investments, if available for general system purposes, divided by operating and maintenance expenses less depreciation, divided by 365. This calculation will exclude accrued debt service for the next fiscal year and all funds in the Risk Reserve and Renewal and Replacement Reserve.

Debt Service: Amount of money necessary to pay principal and interest on bonds outstanding.

Debt Service as a Percent of Revenues: Total revenues divided by total debt service. This ratio measures the debt service burden compared to total revenues.

Risk Management Reserve: HRSD maintains a self-insurance program for some of its risk exposures. HRSD'S Financial Policy requires HRSD to maintain a Risk Management Reserve as of the end of the fiscal year of not less than 25 percent of projected annual self-insured claims costs for known, retained risks.

Senior Debt Service Coverage: Current-year revenues available for debt service divided by current-year senior lien debt service. This ratio indicates the financial margin to meet current senior lien debt service with current revenues available. HRSD's Financial Policy requires that Senior Debt Service Coverage will not be less than 1.5 times senior lien debt service. When

calculating compliance with this coverage requirement, HRSD may make reasonable adjustments to the net revenues as presented on a basis consistent with generally accepted accounting principles. HRSD's Senior Trust Agreement requires Senior Debt Service Coverage, which is determined by dividing the Income Available for Debt Service by the Maximum Annual Debt Service, will not be less than 1.2 times.

Total Debt Service (Adjusted): Calculated in accordance with HRSD's Subordinate Trust Agreement, the ratio determined by dividing the Net Revenues by annual debt service. In such calculation, funds spent on Locality Assets may be excluded from the calculation of Net Revenues under the circumstances described within the definitions of Net Revenues and Operating Expenses. Annual debt service will be based on actual principal and interest payments during the year (i.e., not accrual based).

Total Debt Service Coverage Ratio (GAAP): Calculated in accordance with HRSD's Senior Trust Agreement, the ratio determined by dividing the Net Revenues by annual debt service. In such calculation, funds spent on Locality Assets are considered an expense. Annual debt service will be based on actual principal and interest payments during the year (i.e., not accrual based).

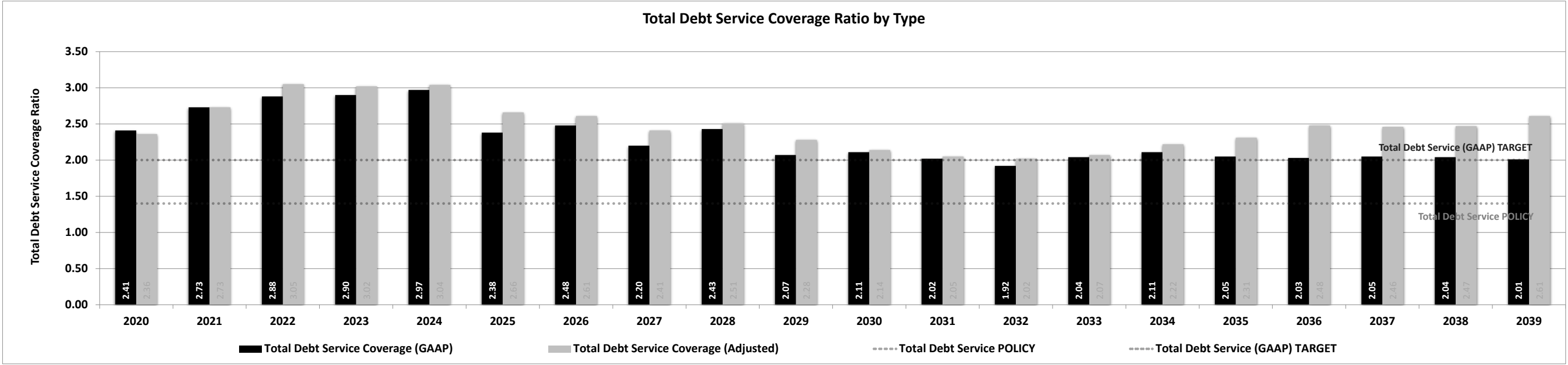
Trust Agreement: The formal agreement between bond holders, acting through a trustee, and HRSD.

Unrestricted Cash: Unrestricted cash and investments at fiscal year-end that are not earmarked for another purpose.

A photograph of a water treatment facility featuring several large, circular concrete tanks. In the foreground, a curved concrete weir is visible, with water cascading over it, creating white foam and splashing. The water in the tanks is a deep blue. In the background, there are more tanks and a metal railing. The entire image is overlaid with a semi-transparent teal graphic consisting of several overlapping curved shapes. The text "Financial Forecast" is written in white, bold, sans-serif font on the left side of the image.

Financial Forecast

Financial Forecast (in thousands)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Operating Budget Forecast																				
<div>Projected Annual Water Consumption Decline</div> <div>Projected Wastewater Rate Increase</div>	9.1%	9.0%	9.1%	9.0%	7.0%	7.0%	7.0%	7.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	3.5%	3.5%
Revenues																				
Operating Revenues	\$ 324,650	\$ 349,347	\$ 376,115	\$ 404,884	\$ 427,953	\$ 452,536	\$ 478,582	\$ 506,039	\$ 530,455	\$ 555,786	\$ 582,476	\$ 610,475	\$ 639,736	\$ 670,677	\$ 703,238	\$ 737,360	\$ 772,988	\$ 810,510	\$ 829,961	\$ 850,256
Non-operating Revenues	13,155	13,422	13,518	13,699	13,714	13,914	14,709	14,871	15,193	15,103	15,575	15,895	15,963	17,226	17,117	17,628	18,372	19,341	19,422	19,725
Total Revenues	337,805	362,768	389,633	418,584	441,667	466,450	493,291	520,910	545,648	570,890	598,051	626,370	655,699	687,903	720,355	754,989	791,360	829,851	849,383	869,981
Expenses																				
Salaries	57,346	59,560	61,859	64,247	66,726	69,302	71,977	74,755	77,641	80,638	83,057	85,549	88,115	90,759	93,482	96,286	99,175	102,150	105,214	108,371
Benefits	24,217	25,330	26,485	27,680	28,930	30,237	31,604	33,034	34,529	36,093	37,578	39,127	40,745	42,435	44,199	46,042	47,967	49,978	52,078	54,273
Materials & Supplies	8,129	8,457	8,799	9,154	9,524	9,909	10,309	10,725	11,159	11,610	12,079	12,441	12,814	13,199	13,595	14,002	14,422	14,855	15,301	15,760
Transportation	1,579	1,623	1,668	1,715	1,763	1,812	1,862	1,914	1,968	2,022	2,079	2,141	2,206	2,272	2,340	2,410	2,482	2,557	2,634	2,713
Utilities	12,726	13,083	8,851	9,099	16,294	27,008	38,553	39,978	41,456	42,990	69,684	72,068	102,833	107,181	110,897	114,743	118,722	122,840	127,100	131,509
Chemical Purchases	10,715	11,044	11,383	11,732	12,092	12,464	12,846	13,241	13,647	14,066	14,498	14,933	15,381	15,842	16,317	16,807	17,311	17,831	18,365	18,916
Contractual Services	34,471	36,195	38,005	39,905	41,900	43,995	46,195	48,504	50,930	53,476	56,150	57,834	59,570	61,357	63,197	65,093	67,046	69,057	71,129	73,263
Miscellaneous Expenses	6,824	7,029	7,240	7,457	7,681	7,911	8,148	8,393	8,645	8,904	9,171	9,446	9,730	10,021	10,322	10,632	10,951	11,279	11,618	11,966
Major Repairs and Replacements	9,001	9,272	9,550	9,836	10,131	10,435	10,748	11,071	11,403	11,745	12,097	12,460	12,834	13,219	13,616	14,024	14,445	14,878	15,324	15,784
Capital Acquisitions	302	311	320	330	339	350	360	371	382	394	405	417	430	443	456	470	484	498	513	529
Total Operating Appropriations from Budget	165,309	171,903	174,157	181,154	195,380	213,421	232,603	241,986	251,759	261,938	296,798	306,418	344,657	356,726	368,421	380,509	393,005	405,923	419,277	433,084
Debt Service	63,895	64,316	66,690	75,386	77,231	92,744	95,259	113,274	112,486	133,158	134,812	152,568	146,697	155,036	152,495	157,013	155,085	168,488	169,830	164,619
Transfer to Capital Improvement Plan (PAYGO)	108,341	120,240	138,931	158,717	158,197	125,260	155,359	149,095	181,149	152,950	149,503	160,368	109,313	175,813	174,162	182,661	199,280	246,781	242,512	233,621
Transfer to General Reserve (Unrestricted Cash)	-	6,306	9,663	3,129	10,651	34,806	9,839	16,312	-	22,576	16,655	6,721	54,720	-	24,933	34,444	43,608	8,258	17,343	38,215
Transfer to Risk Management Reserve	260	4	192	198	208	219	230	242	254	267	281	296	311	327	344	362	381	401	421	443
Total Appropriations	\$ 337,805	\$ 362,768	\$ 389,633	\$ 418,584	\$ 441,667	\$ 466,450	\$ 493,291	\$ 520,910	\$ 545,648	\$ 570,890	\$ 598,051	\$ 626,370	\$ 655,699	\$ 687,903	\$ 720,355	\$ 754,989	\$ 791,360	\$ 829,851	\$ 849,383	\$ 869,981
Capital Improvement Budget Forecast																				
Beginning Capital Reserves	\$ 76,631	\$ 648	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sources of Funds																				
Debt funded (Revenue Bonds and Interim Financing)	-	63,654	87,069	141,283	141,803	174,740	144,641	175,905	193,851	97,050	100,497	59,632	90,687	24,187	50,838	102,339	135,720	103,219	107,488	76,379
Virginia Clean Water Revolving Loan Fund	30,246	3,218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampton Roads Sanitation District - Cash	108,341	120,240	138,931	158,717	158,197	125,260	155,359	149,095	181,149	152,950	149,503	160,368	109,313	175,813	174,162	182,661	199,280	246,781	242,512	233,621
Reimbursements	430	5,241	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Capital Resources	215,648	193,000	230,000	300,000	300,000	300,000	300,000	325,000	375,000	250,000	250,000	220,000	200,000	200,000	225,000	285,000	335,000	350,000	350,000	310,000
Uses of Funds - Capital Expenditures	215,000	193,000	230,000	300,000	300,000	300,000	300,000	325,000	375,000	250,000	250,000	220,000	200,000	200,000	225,000	285,000	335,000	350,000	350,000	310,000
Ending Capital Resources	\$ 648	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserves Balance Forecast																				
Days Cash on Hand	361 days	365 days	365 days	365 days	365 days	365 days	365 days	365 days	367 days	365 days	365 days	365 days	365 days	367 days	365 days	365 days	365 days	365 days	365 days	365 days
Unrestricted Cash	\$ 175,230	\$ 181,536	\$ 191,199	\$ 194,327	\$ 204,979	\$ 239,784	\$ 249,624	\$ 265,936	\$ 265,936	\$ 288,512	\$ 305,167	\$ 311,888	\$ 366,608	\$ 366,608	\$ 391,541	\$ 425,985	\$ 469,593	\$ 477,851	\$ 495,194	\$ 533,409
Risk Reserve	3,613	3,617	3,808	4,007	4,215	4,434	4,664	4,906	5,160	5,428	5,709	6,005	6,316	6,644	6,988	7,350	7,731	8,132	8,553	8,997
Total Reserves Balance	\$ 178,843	\$ 185,153	\$ 195,007	\$ 198,334	\$ 209,193	\$ 244,218	\$ 254,287	\$ 270,842	\$ 271,096	\$ 293,940	\$ 310,877	\$ 317,893	\$ 372,924	\$ 373,251	\$ 398,529	\$ 433,335	\$ 477,324	\$ 485,983	\$ 503,747	\$ 542,405
Financial Ratios Forecast																				
Total Debt Service Coverage (GAAP)	2.41	2.73	2.88	2.90	2.97	2.38	2.48	2.20	2.43	2.07	2.11	2.02	1.92	2.04	2.11	2.05	2.03	2.05	2.04	2.01
Total Debt Service Coverage (Adjusted)	2.36	2.73	3.05	3.02	3.04	2.66	2.61	2.41	2.51	2.28	2.14	2.05	2.02	2.07	2.22	2.31	2.48	2.46	2.47	2.61
CIP % Cash Funded (current year contributions)	50%	62%	60%	53%	53%	42%	52%	46%	48%	61%	60%	73%	55%	88%	77%	64%	59%	71%	69%	75%
Debt Service as a % of Total Revenues	19%	18%	17%	18%	18%	20%	20%	22%	21%	23%	23%	24%	23%	23%	21%	21%	20%	20%	20%	19%



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A photograph of an industrial facility, possibly a water treatment plant, featuring a long, covered walkway with a metal frame and railings. The structure is composed of numerous vertical and horizontal metal beams. In the background, there are various pipes, valves, and mechanical components. The sky is clear and blue. A large, semi-transparent teal shape is overlaid on the left side of the image, extending from the top left towards the bottom right, partially obscuring the walkway and the background.

Operating Budget

Operating Budget

	FY-2020	Adopted FY-2019	Increase/ (Decrease)	Percent Change
Operating Revenues				
Wastewater Treatment Charges	\$ 323,395,000	\$ 297,062,000	\$ 26,333,000	9%
Miscellaneous	1,255,000	1,405,000	(150,000)	(11%)
Total Operating Revenue	324,650,000	298,467,000	26,183,000	9%
Non-Operating Revenues				
Wastewater Facility Charges	6,160,000	6,075,000	85,000	1%
Investment Earnings	4,000,000	2,500,000	1,500,000	60%
Build America Bond Subsidy	2,400,000	2,400,000	-	0%
Other	595,000	820,000	(225,000)	(27%)
Total Non-Operating Revenues	13,155,000	11,795,000	1,360,000	12%
Total Revenues	<u>\$ 337,805,000</u>	<u>\$ 310,262,000</u>	<u>\$ 27,543,000</u>	9%
Operating Appropriations				
General Management	\$ 460,252	\$ 624,583	\$ (164,331)	(26%)
Communications	444,116	423,764	20,352	5%
Finance	14,566,681	13,884,533	682,148	5%
Information Technology	15,854,415	15,089,692	764,723	5%
Talent Management	2,515,281	2,293,202	222,079	10%
Operations	103,821,085	98,842,274	4,978,811	5%
Engineering	7,689,862	7,903,702	(213,840)	(3%)
Water Quality	14,778,034	14,913,423	(135,389)	(1%)
General Expenses	5,529,093	5,761,766	(232,673)	(4%)
Total Operating Appropriations	165,658,819	159,736,939	5,921,880	4%
Appropriations for Debt Service and Transfers				
Debt Service	63,544,841	62,811,000	733,841	1%
Transfer to Capital Improvement Program (CIP)	108,341,340	87,475,061	20,866,279	24%
Transfer to Risk Management Reserve	260,000	239,000	21,000	9%
Total Appropriations for Debt Service and Transfers	172,146,181	150,525,061	21,621,120	14%
Total Appropriations	<u>\$ 337,805,000</u>	<u>\$ 310,262,000</u>	<u>\$ 27,543,000</u>	9%

Operating Budget Summary

	General Management	Communications	Finance	Information Technology	Talent Management	Operations	Engineering	Water Quality	General Expenses
Personal Services	\$ 332,938	\$ 237,112	\$ 6,066,008	\$ 4,428,545	\$ 1,531,227	\$ 34,501,596	\$ 3,983,260	\$ 7,815,545	\$ (1,550,006)
Fringe Benefits	80,814	88,004	2,630,381	1,554,295	615,845	15,418,203	1,479,398	3,199,333	(849,700)
Materials & Supplies	10,000	45,000	70,780	1,250,050	58,500	5,256,561	24,130	1,395,500	18,000
Transportation	7,000	11,500	11,850	22,200	28,100	1,447,280	20,470	30,406	-
Utilities	-	-	282,000	1,180,500	-	10,755,360	-	2,700	505,000
Chemical Purchases	-	-	-	-	-	10,714,718	-	-	-
Contractual Services	9,000	33,000	5,236,464	6,502,100	48,000	15,996,648	1,998,816	1,696,700	7,157,799
Major Repairs	-	-	-	651,000	-	8,330,479	-	20,000	-
Capital Assets	-	-	-	-	-	301,600	-	-	-
Miscellaneous Expense	20,500	29,500	269,198	265,725	233,609	1,098,640	183,788	617,850	248,000
Operating Appropriations	\$ 460,252	\$ 444,116	\$ 14,566,681	\$ 15,854,415	\$ 2,515,281	\$ 103,821,085	\$ 7,689,862	\$ 14,778,034	\$ 5,529,093

Full-time Positions:

Current	2	3	102	45	16	515	43	110
Changes	-	-	-	5	-	1	1	4
Budgeted	2	3	102	50	16	516	44	114

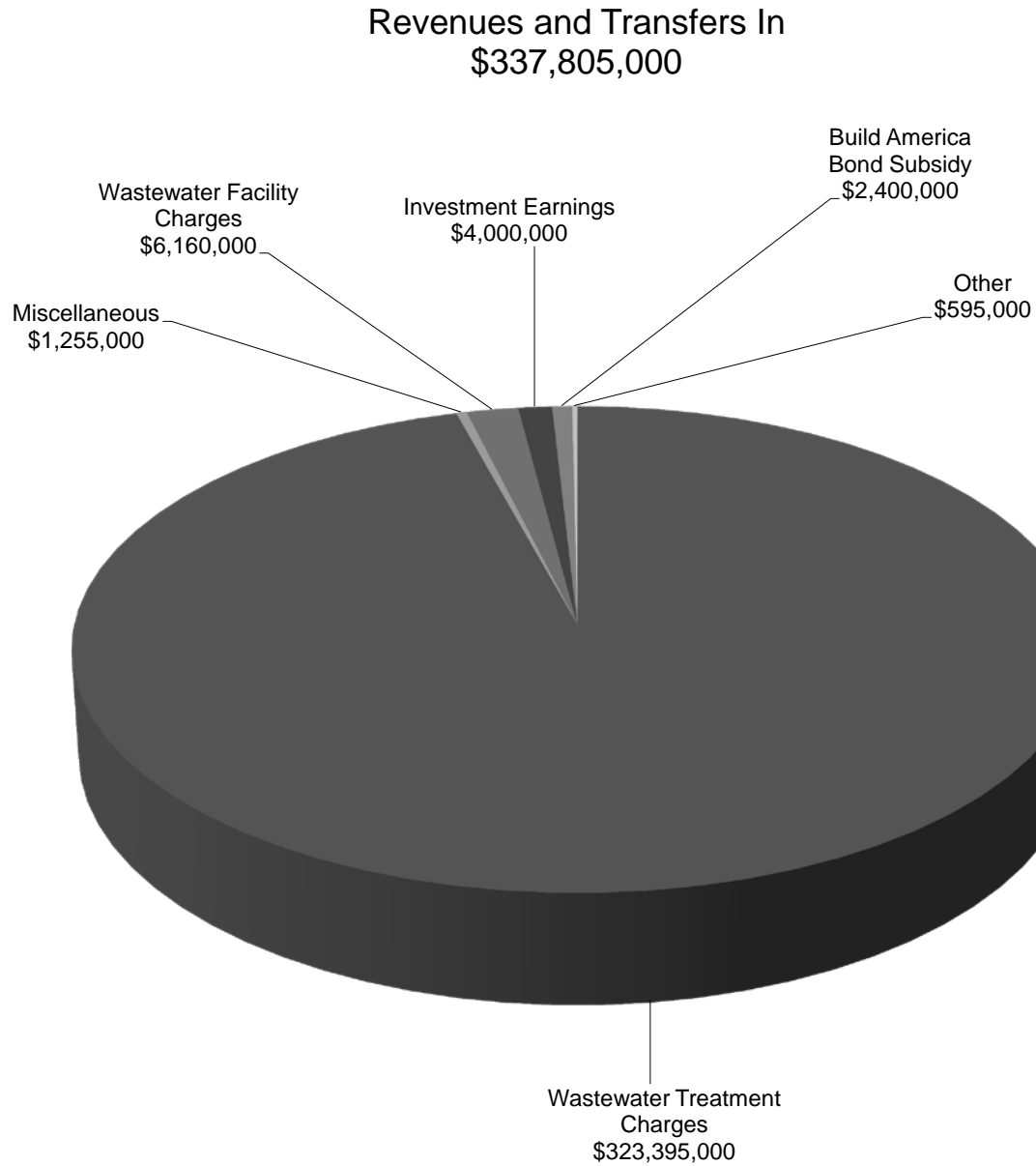
Operating Budget Summary

	FY-2020	Percent of Budget	FY-2019 Budget	Increase/ Decrease	Percent Inc/(Dec)
Personal Services	\$ 57,346,225	17.0%	\$ 55,331,885	\$ 2,014,340	4%
Fringe Benefits	24,216,573	7.2%	24,296,169	(79,596)	(0%)
Materials & Supplies	8,128,521	2.4%	7,190,245	938,276	13%
Transportation	1,578,806	0.5%	1,444,741	134,065	9%
Utilities	12,725,560	3.8%	12,245,138	480,422	4%
Chemical Purchases	10,714,718	3.2%	10,703,626	11,092	0%
Contractual Services	38,678,527	11.4%	37,363,437	1,315,090	4%
Major Repairs	9,001,479	2.7%	7,832,425	1,169,054	15%
Capital Assets	301,600	0.1%	601,500	(299,900)	(50%)
Miscellaneous Expense	2,966,810	0.9%	2,727,773	239,037	9%
Operating Appropriations	<u>165,658,819</u>	49.0%	<u>159,736,939</u>	<u>5,921,880</u>	4%
Debt Service Costs	63,544,841	18.8%	62,811,000	733,841	1%
Transfer to Capital Improvement Program (CIP)	108,341,340	32.1%	87,475,061	20,866,279	24%
Transfer to Risk Management	260,000	0.1%	239,000	21,000	9%
Appropriations for Debt Service and Transfers	<u>172,146,181</u>	51.0%	<u>150,525,061</u>	<u>21,621,120</u>	14%
	<u>\$ 337,805,000</u>	100.0%	<u>\$ 310,262,000</u>	<u>\$ 27,543,000</u>	9%

Full-time Positions:

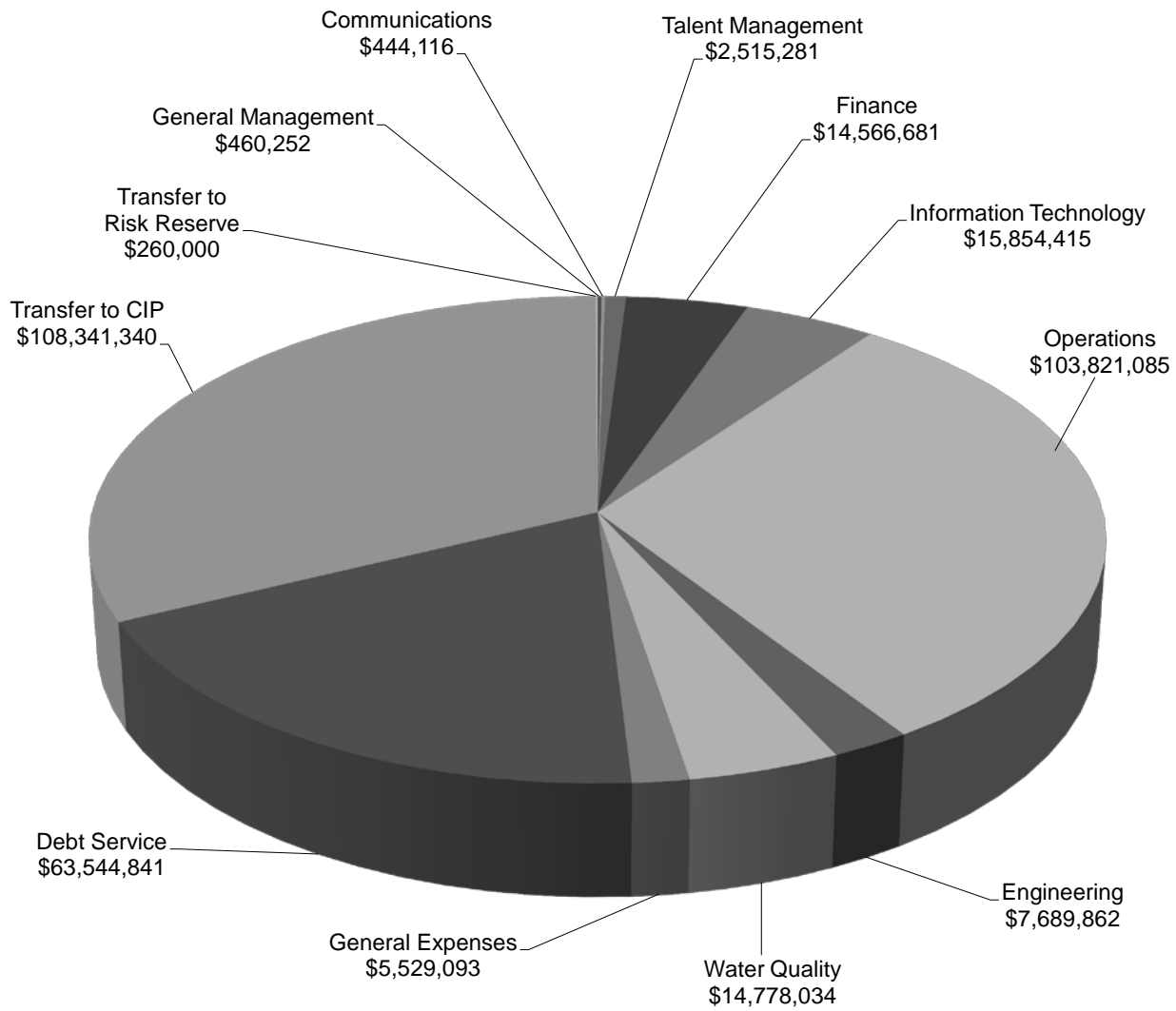
Current	836
Changes	11
Budgeted	847

Operating Budget Charts



Operating Budget Charts

Expenses and Transfers Out \$337,805,000



General Management Department

The General Manager supervises the department directors and the Commission Secretary. The Commission Secretary provides administrative support to the General Manager as well as the HRSD Commission.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 332,938	\$ 427,748	\$ (94,810)	(22%)
Fringe Benefits	80,814	122,835	(42,021)	(34%)
Material & Supplies	10,000	10,000	-	0%
Transportation	7,000	14,000	(7,000)	(50%)
Contractual Services	9,000	20,000	(11,000)	(55%)
Miscellaneous	20,500	30,000	(9,500)	(32%)
Total	\$ 460,252	\$ 624,583	\$ (164,331)	(26%)

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
General Manager		1		1		1
Special Assistant for Compliance Assurance	12	1	(1)	0		0
Commission Secretary	6	1		1		1
Total		3	(1)	2	0	2

Communications Department

The Communications Department supports HRSD's mission and vision through public outreach, community engagement, educational programming and environmental and locality partnerships. The department manages internal and external communications and branding through numerous channels - including publications, traditional media, social media and web, graphic design, speaking engagements, tours, and special events.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 237,112	\$ 247,062	\$ (9,950)	(4%)
Fringe Benefits	88,004	101,402	(13,398)	(13%)
Material & Supplies	45,000	45,000	-	0%
Transportation	11,500	13,800	(2,300)	(17%)
Contractual Services	33,000	-	33,000	0%
Miscellaneous	29,500	16,500	13,000	79%
Total	\$ 444,116	\$ 423,764	\$ 20,352	5%

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Communications	12	1		1		1
Community Relations Liason	6	1	(1)	0		0
Public Information Specialist	6	0	1	1		1
Community Educator	3	1		1		1
Total		3	0	3	0	3

Finance Department

The Finance Department is responsible for HRSD's general financial and business functions, including financial reporting, investment portfolio, debt and risk management and customer billing. The Accounting and Finance Division handles fiscal affairs such as preparing statements, budgets, management reports and payroll. The Business Intelligence Division is the functional lead for the Enterprise Resource Process system. The Capital Program Management Division coordinates the development of the annual Capital Improvement Program. The Customer Care Center Division handles billing, payments, collections, maintenance of customer accounts and liaison with HRSD's customers. The Procurement Division is responsible for purchasing, renting, leasing or otherwise acquiring goods, professional and non-professional services, and certain construction services, managing supplier relationships and disposing of surplus property.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 6,066,008	\$ 5,965,582	\$ 100,426	2%
Fringe Benefits	2,630,381	2,526,249	104,132	4%
Material & Supplies	70,780	86,610	(15,830)	(18%)
Transportation	11,850	14,250	(2,400)	(17%)
Utilities	282,000	271,430	10,570	4%
Contractual Services	5,236,464	4,781,891	454,573	10%
Miscellaneous	269,198	238,521	30,677	13%
Total	\$ 14,566,681	\$ 13,884,533	\$ 682,148	5%

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Finance	12	1		1		1
Chief of Accounting & Finance	11	1		1		1
Chief of Customer Care Center	11	1		1		1
Chief of Procurement	11	1		1		1
Accounting Manager	9	2	1	3		3
Capital Program Manager	9	0	1	1		1
Customer Care Manager	9	4		4		4
Business Analyst	8	3		3		3
Financial Analyst	8	2		2		2
Procurement Analyst	8	2		2		2
Customer Care Supervisor	7	4		4		4
Delinquency Management Analyst	7	0		0	1	1
Accounts Payable Supervisor	6	1		1		1
Accounts Receivable Specialist	6	2		2		2
Payroll Specialist	6	1		1		1
ProCard & Contract Administrator	6	1		1		1
Procurement Specialist	6	4		4		4
Accounting Coordinator	4	1		1		1
Accounts Receivable Technician	4	3		3		3
CIP Coordinator	4	0	1	1		1
Customer Care Administrative Coordinator	4	1		1		1
Customer Care Coordinator	4	4		4		4
Procurement Coordinator	4	0		0	1	1
Account Investigator	3	13	(2)	11		11
Accounts Payable Associate	3	3		3		3
Customer Care Account Representative	3	41		41	(1)	40
Procurement Administrative Assistant	3	3		3	(1)	2
Mail Processing Clerk	2	2		2		2
Total		101	1	102	0	102

Information Technology Department

The Information Technology (IT) Department is responsible for HRSD's computer systems, communication systems, network infrastructure, cellular communications, cyber security, and data management functions. Staff also provides guidance and assistance in the identification and implementation of new technologies, enhancing both organizational efficiency and efficacy. The Enterprise Data Services Division is responsible for application integration and support, data management, and systems analysis and support. The Information Systems and Security Division is responsible for ensuring the safety, integrity, and availability of all HRSD information systems and business data. The Information Technology Operations Division supports departments in achieving their goals and objectives, providing the requisite hardware, software, storage, and network connectivity, to meet business and operational requirements.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 4,428,545	\$ 4,427,273	\$ 1,272	0%
Fringe Benefits	1,554,295	1,607,569	(53,274)	(3%)
Material & Supplies	1,250,050	851,000	399,050	47%
Transportation	22,200	16,200	6,000	37%
Utilities	1,180,500	1,224,000	(43,500)	(4%)
Contractual Services	6,502,100	6,541,000	(38,900)	(1%)
Major Repairs	651,000	192,000	459,000	239%
Miscellaneous	265,725	230,650	35,075	15%
Total	\$ 15,854,415	\$ 15,089,692	\$ 764,723	5%

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Information Technology	12	1		1		1
Chief Information Security Officer	11	0		0	1	1
Chief of Enterprise Data Services	11	1		1		1
Chief of IT Operations & Support	11	1		1		1
Database Administrator	9	3		3		3
Enterprise Architect	9	3		3		3
Industrial Automation Manager	9	1	(1)	0		0
IT Systems Security Manager	9	0		0	1	1
Oracle Developer	9	2		2		2
Programming Development Manager	9	1		1		1
Senior Systems Engineer	9	6		6	1	7
Systems Analysis Manager	9	1		1		1
Industrial Automation Programmer	8	5	(5)	0		0
Senior Programmer Analyst	8	6		6	2	8
Senior Systems Analyst	8	3		3		3
SharePoint Web Developer	8	1		1		1
Unix Systems Administrator	8	2		2		2
IT HelpDesk Supervisor	7	1		1		1
Desktop Support Analyst	6	6		6		6
Systems Analyst	6	1		1		1
Web Portal Programmer	5	1		1		1
IT Administrative Coordinator	4	1		1		1
Telecommunications Support Coordinator	4	1		1		1
Computer Operator	3	3		3		3
Total		51	(6)	45	5	50

Talent Management Department

The Talent Management Department attracts new talent, develops talent and retains existing talent. The Human Resources Division maintains employee records, handles employee recruiting and orientation, administers employee benefits. The Organizational Development and Training (ODT) Division oversees training and the apprenticeship program. The Safety Division monitors risk and works to ensure employee safety.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 1,531,227	\$ 1,366,058	\$ 165,169	12%
Fringe Benefits	615,845	544,900	70,945	13%
Material & Supplies	58,500	68,100	(9,600)	(14%)
Transportation	28,100	27,600	500	2%
Contractual Services	48,000	53,200	(5,200)	(10%)
Miscellaneous	233,609	233,344	265	0%
Total	\$ 2,515,281	\$ 2,293,202	\$ 222,079	10%

Positions

	Grade	Adopted 2019	FY- Adjustments	Final 2019	FY- Adjustments	FY-2020
Director of Talent Management	12	1		1		1
ODT Manager	10	1		1		1
Human Resources Manager	9	1		1		1
Safety Manager	9	1		1		1
Human Resources Business Analyst	8	1		1		1
Human Resources Business Partner	8	0	3	3		3
Industrial Hygienist	8	2		2		2
Training Superintendent	8	1		1		1
Human Resources Specialist	7	3	(3)	0		0
ODT Resource Specialist	6	1		1		1
Safety Technician	5	0		0	1	1
Human Resources Coordinator	4	2		2		2
ODT Coordinator	4	1		1		1
Safety Coordinator	4	1		1	(1)	0
Total		16	0	16	0	16

Operations Department

The Operations Department is responsible for operating and maintaining all of HRSD's treatment plants, pump stations, pipelines, buildings and equipment. HRSD provides wastewater treatment services for over 1.7 million people in 18 cities and counties in Hampton Roads. The department also includes the Director of Water Technology and Research researching new technology with a focus on rapid deployment of innovative solutions. Services are delivered through seven divisions. There are three major treatment plant divisions (each with three treatment plants). Services to small communities that are in the HRSD service area are provided by the Small Communities Division (SCD) – Middle Peninsula which operates four smaller treatment plants and all the associated sewer collection systems for four counties on the Middle Peninsula, including the Town of West Point. The Small Communities Division – Surry includes the operation of two treatment plants and the associated sewer collection systems in the County of Surry. The Electrical and Instrumentation Division supports the electrical and instrumentation maintenance and construction needs of all HRSD facilities as well as programming industrial controls and automation at HRSD facilities. The two Interceptor Divisions operate and maintain over 500 miles of interceptor pipelines and over 100 pump stations ensuring wastewater is conveyed to each treatment plant. The Support Systems Division is responsible for the maintenance for the HRSD fleet, all buildings, operates two carpentry shops and a full service machine shop. The department is also responsible for energy management and research to find innovative, cost effective ways of managing our energy consumption more effectively.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 34,501,596	\$ 33,328,889	\$ 1,172,707	4%
Fringe Benefits	15,418,203	14,828,080	590,123	4%
Material & Supplies	5,256,561	4,631,734	624,827	13%
Transportation	1,447,280	1,305,080	142,200	11%
Utilities	10,755,360	10,247,264	508,096	5%
Chemical Purchases	10,714,718	10,703,626	11,092	0%
Contractual Services	15,996,648	14,737,567	1,259,081	9%
Major Repairs	8,330,479	7,540,425	790,054	10%
Capital Assets	301,600	546,500	(244,900)	(45%)
Miscellaneous	1,098,640	973,109	125,531	13%
Total	\$ 103,821,085	\$ 98,842,274	\$ 4,978,811	5%

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Operations	12	1		1		1
Director of Water Technology and Research	12	1		1		1
Chief of Electrical & Energy Management	11	1	(1)	0		0
Chief of Electrical & Instrumentation Division	11	0	1	1		1
Chief of Interceptor Operations	11	1		1		1
Chief of NS Interceptors & SCD	11	1		1		1
Chief of Process Engineering & Research	11	1		1		1
Chief of Treatment	11	3		3		3
Energy Manager	11	0	1	1		1
Treatment Process Engineer 2	10	3		3		3
Electrical Manager	9	2	(1)	1		1
Industrial Automation Manager	9	0	1	1		1
Instrumentation Manager	9	1		1		1
Interceptor Engineer	9	2		2		2
Plant Manager	9	1		1		1
Project Manager	9	2		2		2
Support Systems Manager	9	1		1		1
SWIFT Project Manager	9	1		1		1
Systems Manager	9	2		2		2
Treatment Process Engineer 1	9	1		1		1
Automotive Superintendent	8	1		1		1
Condition Assessment Superintendent	8	1		1		1
Electrical & Instrumentation Supervisor	8	4		4		4
Electrical Superintendent	8	1		1		1
Facility Superintendent	8	1		1		1
Industrial Automation Programmer	8	0	5	5		5
Interceptor Superintendent	8	2		2		2
Plant Superintendent	8	18		18		18
Chief Foreman	7	2		2		2
Chief Maintenance Management	7	2		2		2
Chief System Operator	7	2		2		2
Coating, Concrete and Roofing Chief Inspector	7	1		1		1

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Electrical & Instrumentation Process Specialist	7	1		1		1
Electrical & Instrumentation Specialist	7	59		59	2	61
Lead Operator	7	32	(1)	31	1	32
Operations Support Specialist	7	1		1		1
Automotive Foreman	6	2		2		2
Coatings Inspector	6	2		2		2
Condition Assessment Supervisor	6	1		1		1
Engineering Assistant	6	4		4		4
Interceptor Foreman	6	7		7		7
Interceptor Systems Supervisor	6	2		2		2
Machinist Foreman	6	1		1		1
Maintenance Planner	6	3		3		3
Pump Station Supervisor	6	2		2		2
Automotive Technician	5	5		5		5
Carpenter	5	4		4		4
Condition Assessment Technician	5	2		2	(2)	0
Equipment Technician	5	3		3		3
Facility Maintenance Technician	5	2		2		2
Interceptor Technician	5	30		30		30
Machinist	5	2		2		2
Maintenance Operator	5	65	2	67	1	68
Plant Operator	5	74	2	76		76
Heavy Equipment Operator I	4	19		19		19
Materials Operations Coordinator	4	2		2		2
Operations Admin Coordinator	4	1		1		1
Operations Coordinator	4	2		2		2
Automotive Administrative Assistant	3	1		1		1
Support Systems Admin Assistant	3	1		1	(1)	0
Utility Administrative Assistant	3	1		1		1
SCADA Administrative Assistant	3	1		1		1
Interceptor Assistant	2	28		28		28
Maintenance Operations Assistant	2	52	(4)	48		48
Plant Clerk	2	9		9		9
Facility Assistant	1	2		2		2
Custodian	1	4		4		4
Subtotal - Operations		487	5	492	1	493
Small Communities						
Systems Manager	9	1		1		1
Systems Superintendent	8	1		1		1
Systems Chief Foreman	7	1		1		1
Systems Lead Operator	7	3		3		3
Systems Foreman	6	0	1	1		1
Systems Operator	5	11	(1)	10		10
Administrative Coordinator	4	1		1		1
Heavy Equipment Operator I	4	1		1		1
Maintenance Operations Assistant	2	3		3		3
SCD Lab Assistant	2	1		1		1
Subtotal - Small Communities		23	0	23	0	23
Total		510	5	515	1	516

Engineering Department

The Engineering Department is responsible for facility planning, design and construction and related support. The Asset Management Division is responsible for the Computerized Maintenance Management System (CMMS) to manage asset information to inform all maintenance, replacement and capital planning decisions. The Design and Construction Divisions deliver capital projects in a manner consistent with HRSD's quality standards. The Planning and Analysis Division manages the Capital Improvement Program (CIP), Hydraulic Modeling, Geographic Information System (GIS), Data Analysis and Records Management System and plans the capital infrastructure required to meet the region's future wastewater needs. The department is also responsible for all property and land acquisition to meet the needs of HRSD.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 3,983,260	\$ 3,786,920	\$ 196,340	5%
Fringe Benefits	1,479,398	1,431,145	48,253	3%
Material & Supplies	24,130	28,201	(4,071)	(14%)
Transportation	20,470	14,905	5,565	37%
Contractual Services	1,998,816	2,484,557	(485,741)	(20%)
Miscellaneous	183,788	157,974	25,814	16%
Total	\$ 7,689,862	\$ 7,903,702	\$ (213,840)	(3%)

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Engineering	12	1		1		1
Chief of Asset Management	11	1		1		1
Chief of Design & Construction	11	2		2		2
Chief of Design & Construction - SWIFT	11	1		1		1
Chief of Planning & Analysis	11	1		1		1
Capital Program Manager	9	1	(1)	0		0
Condition Assessment Manager	9	2		2		2
Data Analysis Manager	9	1		1		1
GIS Manager	9	1		1		1
Hydraulic Analysis Manager	9	4		4		4
Project Manager	9	9		9		9
Asset Management Specialist	8	0	1	1		1
Real Estate Manager	8	1	1	2		2
CMMS Analyst	7	1		1	1	2
Data Analyst	7	4		4	1	5
Engineering Specialist	7	2		2		2
GIS Analyst	7	2		2		2
Contract Specialist	6	3		3		3
GIS CAD Technician	5	2		2		2
CIP Coordinator	4	1	(1)	0		0
Administrative Coordinator	4	1		1		1
CMMS Administrative Assistant	3	1		1	(1)	0
Engineering Clerk	2	1		1		1
Total		43	0	43	1	44

Water Quality Department

The Water Quality (WQ) Department's mission is to provide quality environmental services to support HRSD and its partners. This department helps ensure compliance with HRSD environmental permits and leads regulatory advocacy through the work of three divisions. The Central Environmental Laboratory (CEL) Division uses the Environmental Data Management System (EDMS) and other tools to provide analytical support for numerous monitoring, research and regulatory purposes. The Pretreatment and Pollution Prevention (P3) Division monitors wastewater conveyed to treatment plants using the Pretreatment Information Management System (PIMS) and other tools, and implements its Industrial Wastewater Discharge Regulations to protect treatment plant staff, facilities and processes. The Technical Services Division (TSD) is responsible for a number of activities including environmental monitoring, specialized sampling, treatment process and research studies, the Municipal Assistance Program (MAP) to assist localities, as well as all reporting required by HRSD permits.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 7,815,545	\$ 7,582,353	\$ 233,192	3%
Fringe Benefits	3,199,333	3,018,989	180,344	6%
Material & Supplies	1,395,500	1,439,600	(44,100)	(3%)
Transportation	30,406	38,906	(8,500)	(22%)
Utilities	2,700	2,700	-	0%
Contractual Services	1,696,700	2,117,200	(420,500)	(20%)
Major Repairs	20,000	100,000	(80,000)	(80%)
Capital Assets	-	55,000	(55,000)	(100%)
Miscellaneous	617,850	558,675	59,175	11%
Total	\$ 14,778,034	\$ 14,913,423	\$ (135,389)	(1%)

Positions

	Grade	Adopted FY-2019	Adjustments	Final FY-2019	Adjustments	FY-2020
Director of Water Quality	12	1		1		1
Chief of Lab	11	1		1		1
Chief of P3	11	1		1		1
Chief of TSD	11	1		1		1
Environmental Scientist	9	7		7		7
Lab Manager	9	4		4		4
Lab Quality Assurance Manager	9	1		1		1
P3 Manager	9	4		4		4
WQ/Ops Quality Assurance Manager	9	0		0	1	1
Lab EDMS Administrator	8	1		1		1
Lab Operations Manager	8	1		1		1
Lab Supervising Chemist	8	11	1	12		12
P3 Supervising Specialist	8	3		3		3
TSD Operations Manager	8	1		1		1
TSD Supervising Specialist	8	3		3		3
P3 Administrative Supervising Specialist	7	1		1		1
Lab EDMS Analyst	6	1		1		1
Lab Quality Assurance Specialist	6	1		1		1
Lab Specialist	6	14		14		14
P3 PIMS Analyst	6	1		1		1
P3 Specialist	6	3		3		3
TSD Specialist	6	9		9	2	11
WQ Specialist	6	1		1		1
Lab Data Technician	5	1		1		1
Lab Technician	5	5		5		5
P3 Technician	5	11		11		11
Lab Data Coordinator	4	1		1		1
P3 Administrative Coordinator	4	1		1		1
TSD Operations Coordinator	4	1		1		1
WQ Administrative Coordinator	4	1		1		1
P3 Administrative Assistant	3	2		2		2
TSD Investigator	3	7		7	1	8
Lab Assistant	2	7		7		7
TSD Assistant	2	1		1		1
Total		109	1	110	4	114

General Expenses, Debt Service and Transfers

General Expenses includes operating expenditures not assigned to any specific HRSD Department. Debt Service includes payments on bonds issued by HRSD and through the Virginia Clean Water Revolving Loan Fund (VCWRLF). Transfers Are made to fund the Capital Improvement Program (CIP) and the Risk Management reserve. The costs incurred to issue bonds are included in General Expenses - Miscellaneous.

Expenditure Budget

	FY-2020 Budget	FY-2019 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ (1,550,006)	\$ (1,800,000)	\$ 249,994	(14%)
Fringe Benefits	(849,700)	115,000	(964,700)	(839%)
Material & Supplies	18,000	30,000	(12,000)	(40%)
Utilities	505,000	499,744	5,256	1%
Contractual Services	7,157,799	6,628,022	529,777	8%
Miscellaneous	248,000	289,000	(41,000)	(14%)
Total General Expenses	\$ 5,529,093	\$ 5,761,766	\$ (232,673)	(4%)
Publically Sold Bonds - Principal	17,985,000	16,740,000	\$ 1,245,000	7%
Publically Sold Bonds - Interest	30,926,523	32,110,000	(1,183,477)	(4%)
VCWRLF Bonds	14,633,318	13,961,000	672,318	5%
<i>Subtotal - Debt Service</i>	<i>63,544,841</i>	<i>62,811,000</i>	<i>733,841</i>	<i>1%</i>
Transfer to CIP	108,341,340	87,475,061	20,866,279	24%
Transfer to Risk Management	260,000	239,000	21,000	9%
<i>Subtotal - Transfers</i>	<i>108,601,340</i>	<i>87,714,061</i>	<i>20,887,279</i>	<i>24%</i>
Total Debt Service and Transfers	\$ 172,146,181	\$ 150,525,061	\$ 21,621,120	14%

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Capital Budget



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-2020 in the amount of \$215 million. The remaining years (FY-2021 to FY-2029) 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-2020 to FY-2029 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 \$2.79 billion.

- 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.

Capital Budget

CIP Budget Forecast (in thousands)	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
Beginning Capital Reserves	\$ 77,279	\$ 76,631	\$ 648	\$ -	\$ -
Bonds	1,245,128	-	65,442	88,954	143,301
VCWRLF	33,464	30,246	3,218	-	-
Cash	1,423,106	108,341	118,451	137,046	156,699
Grants and Other Reimbursements	9,671	430	5,241	4,000	-
Total Capital Resources	2,788,648	215,648	193,000	230,000	300,000
Capital Expenditures	2,788,000	215,000	193,000	230,000	300,000
Ending Capital Reserves	\$ 648	\$ 648	\$ -	\$ -	\$ -

Capital Expenditures (in thousands)	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
Administration	\$ 34,738	\$ 19,338	\$ 5,566	\$ 3,793	\$ 3,153
Army Base	28,873	-	-	1,607	5,024
Atlantic	62,590	16,503	10,518	10,208	4,135
Boat Harbor	255,957	23,339	28,740	15,236	16,639
Chesapeake-Elizabeth	127,841	58,726	42,923	9,338	3,805
James River	146,238	8,670	11,918	38,929	32,520
Middle Peninsula	57,733	10,702	3,244	1,611	18,788
Nansemond	309,980	20,775	25,226	7,057	10,802
Surry	7,195	6,224	971	-	-
Virginia Initiative Plant	123,900	5,980	11,219	28,900	38,557
Williamsburg	21,033	8,486	9,799	1,923	824
York River	18,337	2,810	2,664	1,951	4,014
General	1,291,043	32,606	33,714	96,567	141,641
Future Improvements	185,426	841	2,715	1,929	5,811
Subtotal	2,670,882	215,000	189,216	219,048	285,714
Contingency	117,118	-	3,784	10,952	14,286
Total Expenditures	\$ 2,788,000	\$ 215,000	\$ 193,000	\$ 230,000	\$ 300,000

Capital Budget

CIP Budget Forecast (in thousands)

	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
Beginning Capital Reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonds	143,926	176,524	146,761	178,176	199,107	102,937
VCWRLF	-	-	-	-	-	-
Cash	156,074	123,476	153,239	146,824	175,893	147,063
Grants and Other Reimbursements	-	-	-	-	-	-
Total Capital Resources	300,000	300,000	300,000	325,000	375,000	250,000
Capital Expenditures	300,000	300,000	300,000	325,000	375,000	250,000
Ending Capital Reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Capital Expenditures (in thousands)

	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
Administration	\$ 2,890	\$ -	\$ -	\$ -	\$ -	\$ -
Army Base	14,142	3,459	198	964	2,758	721
Atlantic	3,746	2,259	521	1,098	6,804	6,798
Boat Harbor	26,460	32,835	34,610	37,196	28,210	12,690
Chesapeake-Elizabeth	3,086	3,384	3,276	2,086	1,217	-
James River	32,520	21,681	-	-	-	-
Middle Peninsula	22,107	1,281	-	-	-	-
Nansemond	42,077	68,400	73,073	30,626	13,430	18,514
Surry	-	-	-	-	-	-
Virginia Initiative Plant	22,824	7,108	4,867	4,446	-	-
Williamsburg	-	-	-	-	-	-
York River	1,905	1,601	2,394	998	-	-
General	107,743	131,137	138,694	193,460	255,304	160,176
Future Improvements	6,214	12,569	28,082	38,650	49,419	39,195
Subtotal	285,714	285,714	285,714	309,524	357,143	238,095
Contingency	14,286	14,286	14,286	15,476	17,857	11,905
Total Expenditures	\$ 300,000	\$ 300,000	\$ 300,000	\$ 325,000	\$ 375,000	\$ 250,000

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
Administration						
AD012100	Asset Management Implementation	\$ 803	\$ 803	\$ -	\$ -	\$ -
AD012200	Water Quality Services Building Phase II	\$ 14,730	\$ 13,597	\$ 1,133	\$ -	\$ -
AD012300	Central Environmental Laboratory Phase II	\$ 1,978	\$ 58	\$ 1,280	\$ 640	\$ -
AD012400	Capital Program Management Improvements Phase I	\$ 1,727	\$ 1,727	\$ -	\$ -	\$ -
AD012500	Cybersecurity Practice & Procedure Initiative	\$ 15,500	\$ 3,153	\$ 3,153	\$ 3,153	\$ 3,153
	Subtotal	\$ 34,738	\$ 19,338	\$ 5,566	\$ 3,793	\$ 3,153
Army Base						
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ 22,339	\$ -	\$ -	\$ 1,607	\$ 4,832
AB010500	Section W Force Main Replacement	\$ 2,090	\$ -	\$ -	\$ -	\$ 192
AB011800	Army Base to VIP Transmission Force Main	\$ 4,443	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 28,873	\$ -	\$ -	\$ 1,607	\$ 5,024
Atlantic						
AT011520	Shipps Corner Pressure Reducing Station Modifications	\$ 1,458	\$ 9	\$ 107	\$ 671	\$ 671
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ 4,444	\$ -	\$ -	\$ 63	\$ 228
AT012910	Atlantic Treatment Plant FOG Receiving Station	\$ 1,151	\$ 1,116	\$ 35	\$ -	\$ -
AT012920	Atlantic Treatment Plant Access Road Extension	\$ 6,386	\$ 1,373	\$ 1,900	\$ 3,113	\$ -
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ 3,227	\$ 228	\$ 784	\$ 2,216	\$ -
AT013100	South Norfolk Area Gravity Sewer Improvements	\$ 5,460	\$ -	\$ 334	\$ 296	\$ 3,220
AT013200	Doziers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	\$ 258	\$ -	\$ -	\$ -	\$ 17
AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	\$ 10,479	\$ 10,158	\$ 321	\$ -	\$ -
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	\$ 156	\$ 110	\$ 46	\$ -	\$ -
AT013900	Atlantic Treatment Plant Influent Screen Expansion	\$ 1,208	\$ 1,208	\$ -	\$ -	\$ -
AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ 1,069	\$ 675	\$ 394	\$ -	\$ -
AT014100	Suffolk Regional Landfill Transmission Force Main	\$ 12,072	\$ 1,627	\$ 6,597	\$ 3,849	\$ -
AT014301	Atlantic Service Area I/I Reduction Phase I (CHES)	\$ 10,651	\$ -	\$ -	\$ -	\$ -
AT014302	Atlantic Service Area I/I Reduction Phase II (CHES)	\$ 4,478	\$ -	\$ -	\$ -	\$ -
AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ 91	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 62,590	\$ 16,503	\$ 10,518	\$ 10,208	\$ 4,135
Boat Harbor						
BH013020	Willard Avenue Pump Station Replacement	\$ 7,060	\$ 916	\$ 4,333	\$ 1,811	\$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ 3,600	\$ -	\$ 231	\$ 839	\$ 2,528
BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase II	\$ 10,485	\$ 3,148	\$ 5,168	\$ 2,168	\$ -
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	\$ 2,014	\$ -	\$ 16	\$ 585	\$ 1,414
BH014600	46th Street Diversion Sewer Rehabilitation Replacement	\$ 7,562	\$ 652	\$ 4,358	\$ 2,552	\$ -
BH014700	Boat Harbor Outlet Sewer Improvements	\$ 5,663	\$ 4,151	\$ 1,512	\$ -	\$ -
BH014800	Jefferson Avenue Extension Gravity Improvements	\$ 1,938	\$ 1,450	\$ 488	\$ -	\$ -
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	\$ 3,728	\$ 428	\$ 2,326	\$ 974	\$ -
BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	\$ 4,850	\$ 4,850	\$ -	\$ -	\$ -
BH015100	Bloxoms Corner Force Main Replacement	\$ 2,868	\$ 108	\$ 182	\$ 778	\$ 1,800
BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacements	\$ 6,420	\$ 4,521	\$ 1,899	\$ -	\$ -
BH015500	LaSalle Avenue Interceptor Force Main Replacement	\$ 1,887	\$ -	\$ -	\$ -	\$ -
BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Walnut Avenue	\$ 9,643	\$ 991	\$ 6,101	\$ 2,552	\$ -
BH015700	Boat Harbor Treatment Plant Effluent Pump Station and Transmission Force Main	\$ 148,413	\$ 2,125	\$ 2,125	\$ 2,125	\$ 10,091
BH015801	14th Street Offline Storage (BH-HPP-01A)	\$ 14,566	\$ -	\$ -	\$ 853	\$ 808
BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 10,745	\$ -	\$ -	\$ -	\$ -
BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ 14,515	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 255,957	\$ 23,339	\$ 28,740	\$ 15,236	\$ 16,639
Note:	Fats, Oils, and Grease (FOG), Virginia Department of Transportation (VDOT) Interceptor Force Main (IFM) In Flow/Infiltration (I/I) Virginia Initiative Plant (VIP)					

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
Administration							
AD012100	Asset Management Implementation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012200	Water Quality Services Building Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012300	Central Environmental Laboratory Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012400	Capital Program Management Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012500	Cybersecurity Practice & Procedure Initiative	\$ 2,890	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 2,890	\$ -	\$ -	\$ -	\$ -	\$ -
Army Base							
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ 13,629	\$ 2,271	\$ -	\$ -	\$ -	\$ -
AB010500	Section W Force Main Replacement	\$ 513	\$ 1,187	\$ 198	\$ -	\$ -	\$ -
AB011800	Army Base to VIP Transmission Force Main	\$ -	\$ -	\$ -	\$ 964	\$ 2,758	\$ 721
	Subtotal	\$ 14,142	\$ 3,459	\$ 198	\$ 964	\$ 2,758	\$ 721
Atlantic							
AT011520	Shippo Corner Pressure Reducing Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ 2,097	\$ 2,057	\$ -	\$ -	\$ -	\$ -
AT012910	Atlantic Treatment Plant FOG Receiving Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT012920	Atlantic Treatment Plant Access Road Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013100	South Norfolk Area Gravity Sewer Improvements	\$ 1,610	\$ -	\$ -	\$ -	\$ -	\$ -
	Dozers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	\$ 39	\$ 202	\$ -	\$ -	\$ -	\$ -
AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013900	Atlantic Treatment Plant Influent Screen Expansion	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014100	Suffolk Regional Landfill Transmission Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014301	Atlantic Service Area I/I Reduction Phase I (CHES)	\$ -	\$ -	\$ 521	\$ 1,098	\$ 5,687	\$ 3,345
AT014302	Atlantic Service Area I/I Reduction Phase II (CHES)	\$ -	\$ -	\$ -	\$ -	\$ 1,098	\$ 3,380
AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ -	\$ -	\$ -	\$ -	\$ 19	\$ 73
	Subtotal	\$ 3,746	\$ 2,259	\$ 521	\$ 1,098	\$ 6,804	\$ 6,798
Boat Harbor							
BH013020	Willard Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -
BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014600	46th Street Diversion Sewer Rehabilitation Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014700	Boat Harbor Outlet Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014800	Jefferson Avenue Extension Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015100	Bloxoms Corner Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015500	LaSalle Avenue Interceptor Force Main Replacement	\$ 82	\$ 1,124	\$ 680	\$ -	\$ -	\$ -
BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Walnut Avenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Boat Harbor Treatment Plant Effluent Pump Station and Transmission Force Main	\$ 17,736	\$ 25,381	\$ 25,381	\$ 25,381	\$ 25,381	\$ 12,690
BH015801	14th Street Offline Storage (BH-HPP-01A)	\$ 8,114	\$ 4,792	\$ -	\$ -	\$ -	\$ -
BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 526	\$ 738	\$ 6,154	\$ 3,327	\$ -	\$ -
BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ -	\$ 801	\$ 2,395	\$ 8,489	\$ 2,830	\$ -
	Subtotal	\$ 26,460	\$ 32,835	\$ 34,610	\$ 37,196	\$ 28,210	\$ 12,690
Note:	Fats, Oils, and Grease (FOG), Virginia Department of Transportation (VDOT) Interceptor Force Main (IFM) In Flow/Infiltration (I/I) Virginia Initiative Plant (VIP)						

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
Chesapeake-Elizabeth						
CE010400	Independence Boulevard Pressure Reducing Station Modifications	\$ 3,411	\$ 3,411	\$ -	\$ -	\$ -
CE010520	Newtown Road Interceptor Force Main Relocation	\$ 2,042	\$ 28	\$ 2,014	\$ -	\$ -
CE011300	Birchwood Trunk 24-Inch 30-Inch Force Main at Independence Boulevard Replacement Phase II	\$ 1,425	\$ -	\$ -	\$ 509	\$ 916
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	\$ 1,789	\$ -	\$ 21	\$ 134	\$ 643
CE011700	Western Trunk Force Main Replacement	\$ 1,653	\$ 1,653	\$ -	\$ -	\$ -
CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ 11,082	\$ -	\$ -	\$ 200	\$ 2,016
CE011821	Elbow Road Pressure Reducing Station	\$ 5,743	\$ 3,210	\$ 2,533	\$ -	\$ -
CE011822	Providence Road PRS Upgrades and Interconnect Force Main	\$ 10,899	\$ 7,693	\$ 3,206	\$ -	\$ -
CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ 21,029	\$ 8,629	\$ 9,918	\$ 2,482	\$ -
CE011825	Salem Road Interconnect Force Main	\$ 1,080	\$ 1,080	\$ -	\$ -	\$ -
CE011826	Providence Road Off-Line Storage Facility	\$ 26,929	\$ 16,306	\$ 10,624	\$ -	\$ -
CE011827	Atlantic PRS Reliability Modifications	\$ 9,637	\$ 4,288	\$ 5,349	\$ -	\$ -
CE011828	Kempsville PRS Reliability Modifications	\$ 4,187	\$ 2,992	\$ 1,194	\$ -	\$ -
CE011829	Laskin Road PRS Reliability Modifications	\$ 2,173	\$ 2,173	\$ -	\$ -	\$ -
CE011830	Little Creek Pump Station Modifications	\$ 580	\$ 580	\$ -	\$ -	\$ -
CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ 1,789	\$ -	\$ -	\$ 1,789	\$ -
CE011840	Oceana Off-Line Storage Facility	\$ 14,245	\$ 2,093	\$ 8,061	\$ 4,091	\$ -
CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 3,558	\$ -	\$ 3	\$ 133	\$ 230
CE012200	Pine Tree PRS Reliability Modifications	\$ 4,590	\$ 4,590	\$ -	\$ -	\$ -
	Subtotal	\$ 127,841	\$ 58,726	\$ 42,923	\$ 9,338	\$ 3,805
James River						
JR010600	Lucas Creek Pump Station Upgrade	\$ 6,347	\$ 133	\$ 303	\$ 5,912	\$ -
JR011300	Patrick Henry Pump Station Interconnection Force Main	\$ 1,267	\$ 903	\$ 365	\$ -	\$ -
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ 11,134	\$ 3,235	\$ 6,762	\$ 1,137	\$ -
JR012100	Huxley to Middle Ground Force Main Extension	\$ 3,528	\$ 3,252	\$ 276	\$ -	\$ -
JR013000	Morrison Pump Station Discharge Force Main Replacement & Capacity Enhancements	\$ 1,187	\$ 91	\$ 457	\$ 638	\$ -
JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	\$ 2,025	\$ 820	\$ 1,205	\$ -	\$ -
JR013400	James River Treatment Plant Advanced Nutrient Reduction Improvements	\$ 120,750	\$ 237	\$ 2,550	\$ 31,242	\$ 32,520
	Subtotal	\$ 146,238	\$ 8,670	\$ 11,918	\$ 38,929	\$ 32,520
Middle Peninsula						
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ 30	\$ 30	\$ -	\$ -	\$ -
MP012000	King William Treatment Plant Improvements Phase I	\$ 3,380	\$ 2,295	\$ 1,085	\$ -	\$ -
MP012400	West Point Treatment Plant Tertiary Filter	\$ 241	\$ 241	\$ -	\$ -	\$ -
MP012500	Mathews Main Vacuum Pump Station Replacement	\$ 2,126	\$ 1,818	\$ 308	\$ -	\$ -
MP012900	Mathews Nursing Home Line Vacuum Sewer Main Improvements	\$ 779	\$ 779	\$ -	\$ -	\$ -
MP013000	Small Communities Collection System Rehabilitation Phase I	\$ 63	\$ 63	\$ -	\$ -	\$ -
MP013010	Small Communities Collection System Rehabilitation Phase II	\$ 351	\$ 351	\$ -	\$ -	\$ -
MP013020	Small Communities Collection System Rehabilitation Phase III	\$ 527	\$ 261	\$ 265	\$ -	\$ -
MP013100	Small Communities Mobile Dewatering Facilities Installation	\$ 1,192	\$ 1,192	\$ -	\$ -	\$ -
MP013300	King William Treatment Plant Improvements Phase II	\$ 13,927	\$ 178	\$ 483	\$ 432	\$ 6,405
MP013500	Middlesex Collection System-Cooks Corner	\$ 1,248	\$ 1,246	\$ 3	\$ -	\$ -
MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ 1,647	\$ 1,644	\$ 3	\$ -	\$ -
MP013700	Middlesex Interceptor System Program Phase II-Urbanna to Mathews Transmission Force Main	\$ 26,540	\$ 334	\$ 1,097	\$ 1,043	\$ 12,021
MP013800	Middlesex Interceptor System Program Phase III	\$ 5,413	\$ -	\$ -	\$ 136	\$ 363
MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ 270	\$ 270	\$ -	\$ -	\$ -
	Subtotal	\$ 57,733	\$ 10,702	\$ 3,244	\$ 1,611	\$ 18,788
Note:	Pressure Reducing Station (PRS) Supervisory Control and Data Acquisition (SCADA)					

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
Chesapeake-Elizabeth							
CE010400	Independence Boulevard Pressure Reducing Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE010520	Newtown Road Interceptor Force Main Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011300	Birchwood Trunk 24-Inch 30-Inch Force Main at Independence Boulevard Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	\$ 991	\$ -	\$ -	\$ -	\$ -	\$ -
CE011700	Western Trunk Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ 1,391	\$ 2,086	\$ 2,086	\$ 2,086	\$ 1,217	\$ -
CE011821	Elbow Road Pressure Reducing Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011822	Providence Road PRS Upgrades and Interconnect Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011825	Salem Road Interconnect Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011826	Providence Road Off-Line Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011827	Atlantic PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011828	Kempsville PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011829	Laskin Road PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011830	Little Creek Pump Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011840	Oceana Off-Line Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 704	\$ 1,298	\$ 1,190	\$ -	\$ -	\$ -
CE012200	Pine Tree PRS Reliability Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 3,086	\$ 3,384	\$ 3,276	\$ 2,086	\$ 1,217	\$ -
James River							
JR010600	Lucas Creek Pump Station Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR011300	Patrick Henry Pump Station Interconnection Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR012100	Huxley to Middle Ground Force Main Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR013000	Morrison Pump Station Discharge Force Main Replacement & Capacity Enhancements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR013400	James River Treatment Plant Advanced Nutrient Reduction Improvements	\$ 32,520	\$ 21,681	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 32,520	\$ 21,681	\$ -	\$ -	\$ -	\$ -
Middle Peninsula							
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP012000	King William Treatment Plant Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP012400	West Point Treatment Plant Tertiary Filter	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP012500	Mathews Main Vacuum Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP012900	Mathews Nursing Home Line Vacuum Sewer Main Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013000	Small Communities Collection System Rehabilitation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013010	Small Communities Collection System Rehabilitation Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013020	Small Communities Collection System Rehabilitation Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013100	Small Communities Mobile Dewatering Facilities Installation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013300	King William Treatment Plant Improvements Phase II	\$ 6,405	\$ 25	\$ -	\$ -	\$ -	\$ -
MP013500	Middlesex Collection System-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013700	Middlesex Interceptor System Program Phase II-Urbanna to Mathews Transmission Force Main	\$ 12,021	\$ 25	\$ -	\$ -	\$ -	\$ -
MP013800	Middlesex Interceptor System Program Phase III	\$ 3,682	\$ 1,231	\$ -	\$ -	\$ -	\$ -
MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 22,107	\$ 1,281	\$ -	\$ -	\$ -	\$ -
Note:	Pressure Reducing Station (PRS) Supervisory Control and Data Acquisition (SCADA)						

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
Nansemond						
NP010620	Suffolk Pump Station Replacement	\$ 16,108	\$ 1,084	\$ 9,183	\$ 5,841	\$ -
NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replacement	\$ 1,282	\$ 856	\$ 426	\$ -	\$ -
NP012400	Western Branch Sewer System Gravity Improvements	\$ 2,788	\$ -	\$ -	\$ 161	\$ 161
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	\$ 1,565	\$ 1,180	\$ 385	\$ -	\$ -
NP012600	Deep Creek Interceptor Force Main Replacement	\$ 4,207	\$ 3,521	\$ 687	\$ -	\$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	\$ 2,081	\$ 471	\$ 471	\$ 471	\$ 471
NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ 2,210	\$ 1,770	\$ 440	\$ -	\$ -
NP013500	Nansemond Treatment Plant Land Acquisition-Land Stabilization	\$ 4,503	\$ 2,666	\$ 1,837	\$ -	\$ -
NP013600	Nansemond Treatment Plant Land Acquisition-Structure Demolition	\$ 1,632	\$ 996	\$ 635	\$ -	\$ -
NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improvements	\$ 9,563	\$ 4,808	\$ 4,755	\$ -	\$ -
NP013810	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph I	\$ 833	\$ 833	\$ -	\$ -	\$ -
NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph II	\$ 219,712	\$ -	\$ 4,155	\$ 584	\$ 10,170
NP013901	Nansemond Service Area I/I Reduction Phase II (CHES)	\$ 11,256	\$ -	\$ -	\$ -	\$ -
NP013902	Nansemond Service Area I/I Reduction Phase III (CHES)	\$ 8,580	\$ -	\$ -	\$ -	\$ -
NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-03)	\$ 15,930	\$ -	\$ -	\$ -	\$ -
NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ 2,890	\$ -	\$ -	\$ -	\$ -
NP014200	Nansemond Treatment Plant Secondary Clarifier Inlet Replacement Phase I	\$ 690	\$ 463	\$ 227	\$ -	\$ -
NP014300	Smithfield Interim Pressure Reducing Station	\$ 1,200	\$ 1,200	\$ -	\$ -	\$ -
NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ 2,950	\$ 925	\$ 2,025	\$ -	\$ -
	Subtotal	\$ 309,980	\$ 20,775	\$ 25,226	\$ 7,057	\$ 10,802
Surry						
SU010000	Town of Surry Pump Station and Discharge Force Main	\$ 1,158	\$ 1,158	\$ -	\$ -	\$ -
SU010100	Surry County Treatment Plant Infrastructure Improvements	\$ 3,044	\$ 2,073	\$ 971	\$ -	\$ -
SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ 2,993	\$ 2,993	\$ -	\$ -	\$ -
	Subtotal	\$ 7,195	\$ 6,224	\$ 971	\$ -	\$ -
Virginia Initiative Plant						
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	\$ 1,420	\$ 73	\$ 81	\$ 128	\$ 758
VP014010	Ferebee Avenue Pump Station Replacement	\$ 5,914	\$ 334	\$ -	\$ -	\$ 2,790
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	\$ 8,472	\$ 544	\$ -	\$ 3,115	\$ 3,398
VP014700	Ingleside Road Pump Station Replacement	\$ 3,106	\$ 136	\$ 67	\$ 67	\$ 688
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ 1,029	\$ -	\$ -	\$ 103	\$ 926
VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 13,663	\$ 289	\$ 386	\$ 2,652	\$ 5,954
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ 15,473	\$ 825	\$ 1,384	\$ 4,188	\$ 4,188
VP016320	Virginia Initiative Plant Nutrient Reduction Improvements Contract B	\$ 602	\$ 602	\$ -	\$ -	\$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ 2,023	\$ 38	\$ 104	\$ 1,305	\$ 576
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	\$ 2,486	\$ 91	\$ 59	\$ 290	\$ 1,534
VP017100	Central Norfolk Area Gravity Sewer Improvements	\$ 2,534	\$ -	\$ -	\$ 49	\$ 211
VP018000	Park Avenue Pump Station Replacement	\$ 6,740	\$ 677	\$ 4,042	\$ 2,021	\$ -
VP018200	Effingham Interceptor Vault Removal	\$ 814	\$ 471	\$ 343	\$ -	\$ -
VP018301	VIP Service Area I/I Reduction Phase I (PORTS)	\$ 12,843	\$ 570	\$ 1,692	\$ 5,510	\$ 5,054
VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ 10,138	\$ -	\$ -	\$ -	\$ -
VP018303	VIP Service Area I/I Reduction Phase III (PORTS)	\$ 9,266	\$ 541	\$ 1,180	\$ 4,906	\$ 2,638
VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ 5,276	\$ -	\$ -	\$ 223	\$ 244
VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ 2,524	\$ -	\$ -	\$ -	\$ 171
VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-HPP-05)	\$ 18,430	\$ 638	\$ 878	\$ 4,343	\$ 9,428
VP018500	Elizabeth River Crossing Reliability Improvements	\$ 1,150	\$ 150	\$ 1,000	\$ -	\$ -
	Subtotal	\$ 123,900	\$ 5,980	\$ 11,219	\$ 28,900	\$ 38,557
Williamsburg						
WB012200	North Trunk Force Main Part B Replacement	\$ 475	\$ 475	\$ -	\$ -	\$ -
WB012400	Williamsburg Treatment Plant Generator and Switchgear Replacement	\$ 15,193	\$ 6,216	\$ 8,277	\$ 700	\$ -
WB012500	Lodge Road Pump Station Upgrades	\$ 1,516	\$ 8	\$ 156	\$ 528	\$ 824
WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehabilitation	\$ 2,420	\$ 1,453	\$ 967	\$ -	\$ -
WB012700	Williamsburg Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ 309	\$ 309	\$ -	\$ -	\$ -
WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ 1,120	\$ 25	\$ 399	\$ 696	\$ -
	Subtotal	\$ 21,033	\$ 8,486	\$ 9,799	\$ 1,923	\$ 824

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
Nansemond							
NP010620	Suffolk Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP012400	Western Branch Sewer System Gravity Improvements	\$ 2,466	\$ -	\$ -	\$ -	\$ -	\$ -
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP012600	Deep Creek Interceptor Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	\$ 196	\$ -	\$ -	\$ -	\$ -	\$ -
NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013500	Nansemond Treatment Plant Land Acquisition-Land Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013600	Nansemond Treatment Plant Land Acquisition-Structure Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013810	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph II	\$ 39,414	\$ 67,937	\$ 72,124	\$ 24,239	\$ 1,089	\$ -
NP013901	Nansemond Service Area I/I Reduction Phase II (CHES)	\$ -	\$ -	\$ -	\$ 1,495	\$ 2,142	\$ 7,620
NP013902	Nansemond Service Area I/I Reduction Phase III (CHES)	\$ -	\$ -	\$ -	\$ 820	\$ 1,606	\$ 6,154
NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-03)	\$ -	\$ 463	\$ 949	\$ 3,871	\$ 7,985	\$ 2,662
NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ -	\$ -	\$ -	\$ 201	\$ 609	\$ 2,079
NP014200	Nansemond Treatment Plant Secondary Clarifier Inlet Replacement Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014300	Smithfield Interim Pressure Reducing Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 42,077	\$ 68,400	\$ 73,073	\$ 30,626	\$ 13,430	\$ 18,514
Surry							
SU010000	Town of Surry Pump Station and Discharge Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SU010100	Surry County Treatment Plant Infrastructure Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Virginia Initiative Plant							
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	\$ 379	\$ -	\$ -	\$ -	\$ -	\$ -
VP014010	Ferebee Avenue Pump Station Replacement	\$ 2,790	\$ -	\$ -	\$ -	\$ -	\$ -
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	\$ 1,416	\$ -	\$ -	\$ -	\$ -	\$ -
VP014700	Ingleside Road Pump Station Replacement	\$ 1,611	\$ 537	\$ -	\$ -	\$ -	\$ -
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 4,382	\$ -	\$ -	\$ -	\$ -	\$ -
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ 4,188	\$ 698	\$ -	\$ -	\$ -	\$ -
VP016320	Virginia Initiative Plant Nutrient Reduction Improvements Contract B	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	\$ 511	\$ -	\$ -	\$ -	\$ -	\$ -
VP017100	Central Norfolk Area Gravity Sewer Improvements	\$ 1,067	\$ 1,207	\$ -	\$ -	\$ -	\$ -
VP018000	Park Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018200	Effingham Interceptor Vault Removal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018301	VIP Service Area I/I Reduction Phase I (PORTS)	\$ 17	\$ -	\$ -	\$ -	\$ -	\$ -
VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ 111	\$ 714	\$ 4,867	\$ 4,446	\$ -	\$ -
VP018303	VIP Service Area I/I Reduction Phase III (PORTS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ 2,279	\$ 2,530	\$ -	\$ -	\$ -	\$ -
VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ 930	\$ 1,423	\$ -	\$ -	\$ -	\$ -
VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-HPP-05)	\$ 3,143	\$ -	\$ -	\$ -	\$ -	\$ -
VP018500	Elizabeth River Crossing Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 22,824	\$ 7,108	\$ 4,867	\$ 4,446	\$ -	\$ -
Williamsburg							
WB012200	North Trunk Force Main Part B Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012400	Williamsburg Treatment Plant Generator and Switchgear Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012500	Lodge Road Pump Station Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012700	Williamsburg Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2020 to FY-2029	FY-2020	FY-2021	FY-2022	FY-2023
York River						
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	\$ 3,122	\$ -	\$ -	\$ 227	\$ 1,501
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	\$ 4,255	\$ 68	\$ 332	\$ 1,398	\$ 2,454
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	\$ 5,592	\$ -	\$ -	\$ 32	\$ 58
YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ 1,019	\$ 235	\$ 784	\$ -	\$ -
YR013600	York River Treatment Plant Solids Handling Electrical Improvements	\$ 430	\$ 430	\$ -	\$ -	\$ -
YR013710	York River Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ 2,000	\$ 1,900	\$ 100	\$ -	\$ -
YR013900	York River System Isolation Valve Installation and Replacement	\$ 1,919	\$ 177	\$ 1,448	\$ 294	\$ -
	Subtotal	\$ 18,337	\$ 2,810	\$ 2,664	\$ 1,951	\$ 4,014
General						
GN010730	Horizontal Valve Replacement Phase III	\$ 1,082	\$ 457	\$ 625	\$ -	\$ -
GN011700	Pump Station Generators and Standby Pump Upgrades	\$ 5,264	\$ 2,632	\$ 2,632	\$ -	\$ -
GN012130	Manhole Rehabilitation-Replacement Phase I and North Shore Siphon Chamber Rehabilitation Phase I	\$ 3,834	\$ 2,700	\$ 1,134	\$ -	\$ -
GN012140	Pump Station Wet Well Rehabilitation Phase I	\$ 515	\$ 515	\$ -	\$ -	\$ -
GN012800	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ 600	\$ 600	\$ -	\$ -	\$ -
GN013300	Treatment Plant Grease Handling Facilities	\$ 8,832	\$ 2,031	\$ 4,527	\$ 2,274	\$ -
GN014500	Renewable Energy Facility and Associated Plant Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
GN014900	North Shore Gravity Sewer Improvements Phase I	\$ 4,539	\$ 229	\$ 220	\$ 2,551	\$ 1,538
GN015000	South Shore Gravity Sewer Improvements Phase I	\$ 754	\$ -	\$ 38	\$ 67	\$ 243
GN015300	Interceptor System Valve Improvements Phase I	\$ 2,594	\$ 161	\$ 555	\$ 1,408	\$ 469
GN015400	South Shore Aerial Crossing Improvements	\$ 268	\$ 4	\$ 15	\$ 11	\$ 141
GN015800	North Shore Automated Diversion Facilities	\$ 1,338	\$ 803	\$ 535	\$ -	\$ -
GN016200	Sustainable Water Phase 3 – Demonstration Facility (SWIFT)	\$ 71	\$ 71	\$ -	\$ -	\$ -
GN016310	Integrated Planning of SWIFT	\$ 7,664	\$ 2,002	\$ 1,941	\$ 1,941	\$ 1,780
GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ 1,181	\$ 306	\$ 350	\$ 175	\$ 350
GN016320	Program Management of SWIFT Full Scale Implementation	\$ 67,665	\$ 3,204	\$ 4,321	\$ 5,842	\$ 10,052
GN016330	Well Services for SWIFT	\$ 1,157	\$ 1,157	\$ -	\$ -	\$ -
GN016341	VIP SWIFT Land Acquisition	\$ 15,000	\$ -	\$ -	\$ -	\$ 15,000
GN016342	Williamsburg SWIFT Land Acquisition	\$ 868	\$ 868	\$ -	\$ -	\$ -
GN016343	James River SWIFT Land Acquisition	\$ 3,310	\$ 3,310	\$ -	\$ -	\$ -
GN016350	Williamsburg SWIFT Facility	\$ 105,905	\$ 230	\$ 7,284	\$ 45,686	\$ 46,671
GN016351	Williamsburg Recharge Wells	\$ 10,300	\$ 76	\$ 392	\$ 7,458	\$ 2,374
GN016360	James River SWIFT Facility	\$ 151,871	\$ 3,170	\$ 1,157	\$ 12,242	\$ 43,694
GN016361	James River Recharge Wells	\$ 10,780	\$ -	\$ -	\$ 299	\$ 554
GN016370	York River SWIFT Facility	\$ 136,960	\$ -	\$ -	\$ -	\$ -
GN016371	York River Recharge Wells	\$ 13,940	\$ -	\$ -	\$ -	\$ -
GN016380	Nansemond SWIFT Facility	\$ 282,991	\$ -	\$ -	\$ 5,553	\$ 740
GN016381	Nansemond Recharge Wells	\$ 24,630	\$ -	\$ -	\$ -	\$ -
GN016390	VIP SWIFT Facility	\$ 287,187	\$ -	\$ -	\$ -	\$ 6,966
GN016391	VIP Recharge Wells	\$ 37,503	\$ -	\$ -	\$ -	\$ -
GN016392	VIP SWIFT Site Work	\$ 38,185	\$ -	\$ -	\$ -	\$ 187
GN016400	Treatment Plant Dewatering Replacement Phase I	\$ 2,828	\$ 2,828	\$ -	\$ -	\$ -
GN016500	JR and NTP Dewatering Building Mod and Centrifuge Replacement	\$ 597	\$ 597	\$ -	\$ -	\$ -
GN016600	South Shore High Point Air Vent Installation Phase I	\$ 309	\$ 309	\$ -	\$ -	\$ -
GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ 2,569	\$ 469	\$ 2,100	\$ -	\$ -
GN016800	Fleet Management (FY19)	\$ -	\$ -	\$ -	\$ -	\$ -
GN016900	Mobile Workforce Implementation	\$ 515	\$ 515	\$ -	\$ -	\$ -
GN017100	Climate Change Planning	\$ 3,000	\$ 1,375	\$ 1,500	\$ 125	\$ -
GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II	\$ 9,005	\$ 750	\$ 2,458	\$ 4,050	\$ 1,748
GN017300	Treatment Plant Dewatering Replacement Program	\$ 24,500	\$ -	\$ -	\$ 3,500	\$ 7,000
GN017400	Treatment Plant Dewatering Replacement Phase III	\$ 3,500	\$ -	\$ 735	\$ 2,074	\$ 691
GN017500	Fleet Management Program	\$ 16,195	\$ -	\$ 1,193	\$ 1,312	\$ 1,443
GN017600	Fleet Management (FY20)	\$ 1,237	\$ 1,237	\$ -	\$ -	\$ -
	Subtotal	\$ 1,291,043	\$ 32,606	\$ 33,714	\$ 96,567	\$ 141,641
Future Improvements						
IP010800	Regional Wet Weather Improvements	\$ 29,750	\$ 52	\$ 225	\$ 1,425	\$ 2,201
IP011000	Advanced Treatment Infrastructure Upgrades	\$ 155,676	\$ 789	\$ 2,490	\$ 503	\$ 3,610
	Subtotal	\$ 185,426	\$ 841	\$ 2,715	\$ 1,929	\$ 5,811
CIP TOTALS		\$ 2,670,882	\$ 215,000	\$ 189,216	\$ 219,048	\$ 285,714
Note:	James River Treatment Plant (JR) Nansemond Treatment Plant (NTP)					

FY-2020 to FY-2029

Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2024	FY-2025	FY-2026	FY-2027	FY-2028	FY-2029
York River							
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	\$ 1,393	\$ -	\$ -	\$ -	\$ -	\$ -
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	\$ 509	\$ 1,601	\$ 2,394	\$ 998	\$ -	\$ -
YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR013600	York River Treatment Plant Solids Handling Electrical Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR013710	York River Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR013900	York River System Isolation Valve Installation and Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 1,905	\$ 1,601	\$ 2,394	\$ 998	\$ -	\$ -
General							
GN010730	Horizontal Valve Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN011700	Pump Station Generators and Standby Pump Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN012130	Manhole Rehabilitation-Replacement Phase I and North Shore Siphon Chamber Rehabilitation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN012140	Pump Station Wet Well Rehabilitation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN012800	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN013300	Treatment Plant Grease Handling Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN014500	Renewable Energy Facility and Associated Plant Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN014900	North Shore Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015000	South Shore Gravity Sewer Improvements Phase I	\$ 406	\$ -	\$ -	\$ -	\$ -	\$ -
GN015300	Interceptor System Valve Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015400	South Shore Aerial Crossing Improvements	\$ 97	\$ -	\$ -	\$ -	\$ -	\$ -
GN015800	North Shore Automated Diversion Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016200	Sustainable Water Phase 3 – Demonstration Facility (SWIFT)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016310	Integrated Planning of SWIFT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016320	Program Management of SWIFT Full Scale Implementation	\$ 11,049	\$ 10,756	\$ 8,527	\$ 3,021	\$ 3,132	\$ 7,760
GN016330	Well Services for SWIFT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016341	VIP SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016342	Williamsburg SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016343	James River SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016350	Williamsburg SWIFT Facility	\$ 5,560	\$ 473	\$ -	\$ -	\$ -	\$ -
GN016351	Williamsburg Recharge Wells	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016360	James River SWIFT Facility	\$ 58,633	\$ 25,499	\$ 7,476	\$ -	\$ -	\$ -
GN016361	James River Recharge Wells	\$ 8,722	\$ 1,205	\$ -	\$ -	\$ -	\$ -
GN016370	York River SWIFT Facility	\$ 2,986	\$ 3,538	\$ 14,804	\$ 47,951	\$ 52,263	\$ 15,418
GN016371	York River Recharge Wells	\$ -	\$ -	\$ 386	\$ 2,193	\$ 10,905	\$ 456
GN016380	Nansemond SWIFT Facility	\$ 14,158	\$ 64,403	\$ 55,216	\$ 61,291	\$ 66,409	\$ 15,221
GN016381	Nansemond Recharge Wells	\$ -	\$ 469	\$ 702	\$ 13,088	\$ 10,194	\$ 177
GN016390	VIP SWIFT Facility	\$ 308	\$ 11,412	\$ 20,564	\$ 62,375	\$ 96,163	\$ 89,398
GN016391	VIP Recharge Wells	\$ -	\$ -	\$ -	\$ 1,399	\$ 10,414	\$ 25,690
GN016392	VIP SWIFT Site Work	\$ 735	\$ 8,136	\$ 29,099	\$ 28	\$ -	\$ -
GN016400	Treatment Plant Dewatering Replacement Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016500	JR and NTP Dewatering Building Mod and Centrifuge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016600	South Shore High Point Air Vent Installation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016800	Fleet Management (FY19)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016900	Mobile Workforce Implementation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017100	Climate Change Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017300	Treatment Plant Dewatering Replacement Program	\$ 3,500	\$ 3,500	\$ -	\$ -	\$ 3,500	\$ 3,500
GN017400	Treatment Plant Dewatering Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017500	Fleet Management Program	\$ 1,587	\$ 1,746	\$ 1,921	\$ 2,113	\$ 2,324	\$ 2,556
GN017600	Fleet Management (FY20)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 107,743	\$ 131,137	\$ 138,694	\$ 193,460	\$ 255,304	\$ 160,176
Future Improvements							
IP010800	Regional Wet Weather Improvements	\$ 2,268	\$ 2,063	\$ 3,126	\$ 5,651	\$ 5,769	\$ 6,970
IP011000	Advanced Treatment Infrastructure Upgrades	\$ 3,946	\$ 10,507	\$ 24,956	\$ 32,999	\$ 43,650	\$ 32,226
	Subtotal	\$ 6,214	\$ 12,569	\$ 28,082	\$ 38,650	\$ 49,419	\$ 39,195
	CIP TOTALS	\$ 285,714	\$ 285,714	\$ 285,714	\$ 309,524	\$ 357,143	\$ 238,095
Note:	James River Treatment Plant (JR) Nansemond Treatment Plant (NTP)						

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The photos used throughout this publication feature HRSD's Virginia Initiative Plant in Norfolk, Virginia.*