



Annual Budget

Fiscal Year 2022

(July 1, 2021 - June 30, 2022)

HRSD Annual Budget For
Fiscal Year 2022
(July 1, 2021 – June 30, 2022)

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Introduction

The image features a monochromatic blue color scheme. The background is a close-up, high-speed photograph of water splashing over dark, textured rocks. The water droplets are captured in mid-air, creating a sense of movement and freshness. The overall aesthetic is clean and modern, typical of a corporate or educational presentation cover.

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 81 years, HRSD has developed into one of the premier wastewater treatment organizations in the nation. With 17 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 81-year investment in wastewater infrastructure.

The Governor-appointed, eight-member HRSD Commission approved this Fiscal Year 2022 budget at its regular meeting on March 25, 2021. 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 \$1.25 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 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, that is not enough, and the Commonwealth has focused efforts on removing more nutrients from the HRSD wastewater facilities to meet statewide commitments required in the upper portions of the Bay, particularly in the Potomac River watershed, and to offset delays in meeting nutrient reduction goals largely in unregulated sectors such as agriculture. As a result, the General Assembly passed legislation creating the Enhanced Nutrient Removal Certainty Program during the 2021 Special Session. This legislative mandate commits HRSD to invest nearly \$2 billion in nutrient removal and related treatment upgrades, with a major portion by 2025 and additional amounts by 2032. These projects, many of which HRSD planned to accomplish, are now tied to a compliance schedule, eliminating any flexibility HRSD had with implementation (e.g., the option to defer or cancel a project for various reasons), potentially increasing the overall costs to meet the compressed compliance schedule. As a result of this combination of state-controlled factors, HRSD ratepayers will be carrying a disproportionately high percentage of the cost for the entire Commonwealth to accomplish its nutrient reduction goals by the 2025 target date under US EPA oversight.

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). HRSD's SWIFT program will 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 2022. The SWIFT Research Center began operations in May 2018 and has already recharged the aquifer with over 400 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 \$3.0 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 2022 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' 2021 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 water investment at over \$81 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 4 percent in 2017. State, regional and local governments have had to fill the funding gap, passing on significant rate increases as utilities must price service to recover full costs.

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 81 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". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ted Henifin, P.E.
General Manager

Principal Officials

May 25, 2021

COMMISSIONERS

Frederick N. Elofson, CPA, Chair

Maurice P. Lynch, PhD, Vice-Chair

Michael E. Glenn
Stephen C. Rodriguez

Vishnu K. Lakdawala, PhD
Elizabeth A. Taraski, PhD

Willie Levenston, Jr.
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

Sands Anderson, PC
General 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	20 communities encompassing 4,998 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-2022)	872
Miles of Interceptor Systems	541 Miles
Wastewater Treated	141 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	Aa1	n/a

Operating Budget (FY-2022)	\$357,495,000
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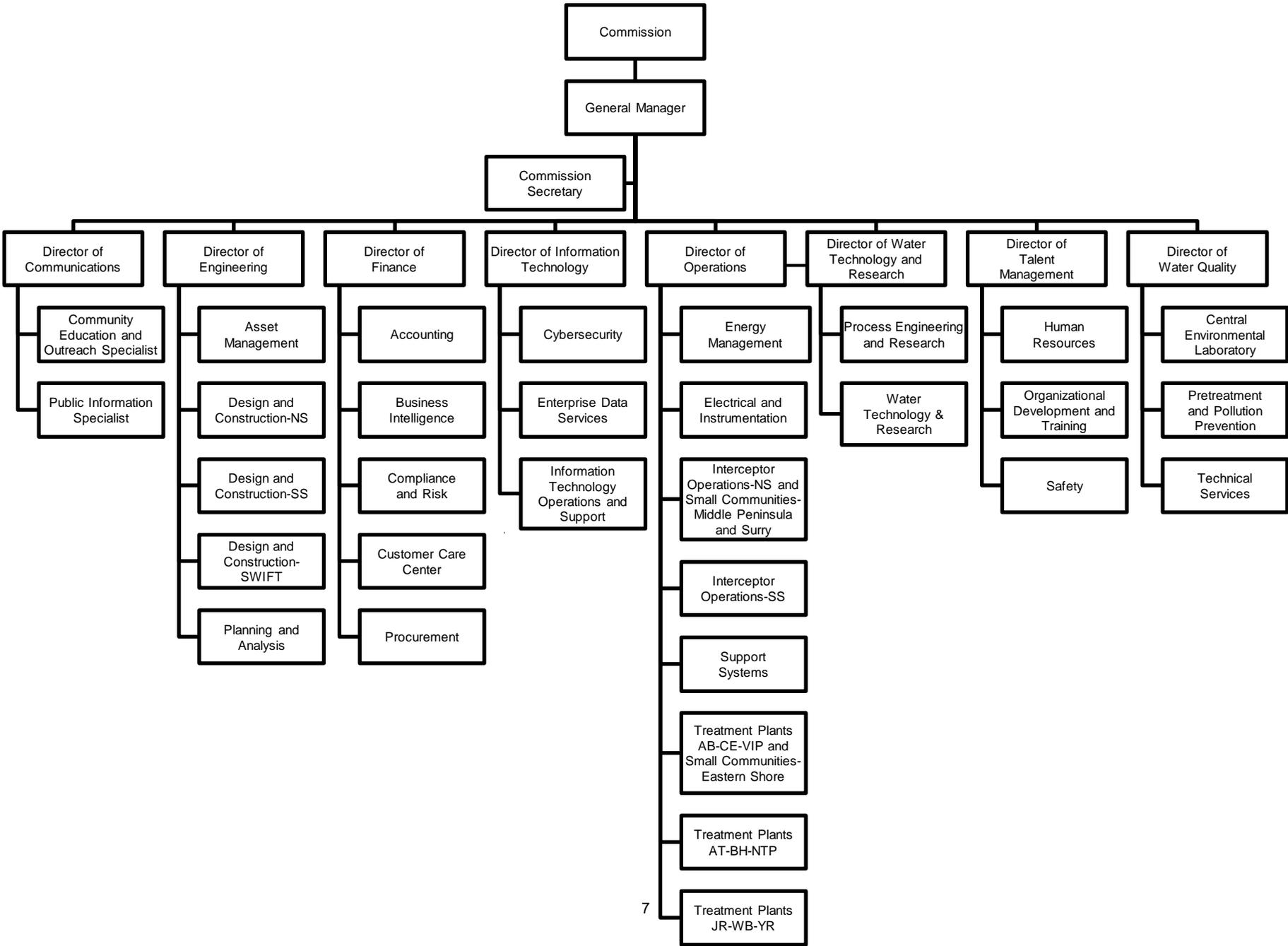
HRSD Service Area



10/2020

HRSD Organization Chart

July 1, 2021



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 2020.

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 the following HRSD treatment plants during the year ended June 30, 2020: Atlantic—Platinum Award (5 consecutive years of compliance), Boat Harbor—Platinum (18 consecutive years), James River—Platinum (6 consecutive years), Nansemond—Platinum (18 consecutive years), Virginia Initiative Plant—Platinum (24 consecutive years), Williamsburg—Platinum (25 consecutive years) and York River—Platinum (12 consecutive years).

Additional awards and honors received during the year ended June 30, 2020 include NACWA National Environmental Achievement Awards in the categories of Public Information and Education, and Workforce Development. HRSD also received the 2019 Oracle Construction and Engineering Excellence Award for Systems Integration in Public Infrastructure. The Virginia Initiative Plant was awarded the Virginia 2020 Pinnacle Award from the American Council of Engineering Companies for the plant's Nutrient Reduction Improvements Project. HRSD was also awarded a Design-Build Institute of America National Award in the "Water/Wastewater" Category and an Honorable Mention in the "Best in Process" Category for the SWIFT Research Center. The SWIFT Program and SWIFT Research Center also earned the 2019 Engineering Achievement Award from the Engineers Club of Hampton Roads.

Rate Schedules

WASTEWATER TREATMENT RATE SCHEDULE

<u>Service</u>	<u>FY-2022</u>		<u>FY-2021</u>	
Flow (monthly basis)				
Per CCF *	\$	6.39	\$	5.86
Minimum charge (per day)		0.30		0.30
Surcharge, per milligrams/liter per CCF				
	<u>In Excess of</u>		<u>In Excess of</u>	
Biochemical Oxygen Demand (BOD)	297 mg/L	\$ 0.000176	282 mg/L	\$ 0.000129
Total Suspended Solids (TSS)	282 mg/L	0.000584	261 mg/L	0.000630
Total Phosphorus (TP)	7 mg/L	0.010050	6 mg/L	0.009871
Total Kjeldahl Nitrogen (TKN)	57 mg/L	0.002660	47 mg/L	0.003378
Surcharge, per 100 pounds				
BOD	297 mg/L	\$ 2.83	282 mg/L	\$ 2.07
TSS	282 mg/L	9.34	261 mg/L	10.08
TP	7 mg/L	160.99	6 mg/L	158.12
TKN	57 mg/L	42.61	47 mg/L	54.11
Septic, per gallon	\$	0.1717	\$	0.1717
Fats, Oils, and Grease (FOG), per gallon	\$	0.2737	\$	n/a
Town Wholesale Treatment, per 1000 gallons	\$	3.55	\$	n/a
Residential flat rate (per day)	\$	1.74	\$	1.62

* CCF = 100 Cubic Feet (approximately 748 gallons)

VOLUME BASED FACILITY RATE SCHEDULE

<u>Meter Size</u>	<u>FY-2022</u>	<u>FY-2021</u>
5/8 Inch	\$ 2,055	\$ 1,905
3/4 Inch	4,210	4,210
1 Inch	7,410	7,410
1 ½ Inch	16,645	16,645
2 Inch	31,465	30,505
3 Inch	80,405	73,810
4 Inch	156,530	138,445
6 Inch	400,625	336,960
8 Inch	780,840	634,710
10 Inch	1,310,665	1,038,525
12 Inch	2,001,460	1,554,120
14 Inch	2,863,155	2,186,505
16 Inch	3,904,635	2,940,135

SMALL COMMUNITIES RATE SCHEDULE

<u>Flow (monthly basis) per 1,000 gallons</u>	<u>FY-2022</u>	<u>FY-2021</u>
Accomack	\$ 14.28	\$ n/a
King William	14.54	13.82
Mathews	14.28	13.43
Middlesex/Urbanna	14.28	13.43
Surry	14.28	13.43
West Point	14.28	13.62
Residential flat rate (per day)		
Accomack	\$ 1.90	\$ n/a
King William	1.94	1.84
Mathews	1.90	1.79
Middlesex/Urbanna	1.90	1.79
Surry	1.90	1.79
West Point	1.90	1.82
Minimum charge - metered accounts (per day)	\$ 0.30	\$ 0.30

FEES

	<u>FY-2022</u>	<u>FY-2021</u>
Damaged meter/antenna (plus cost of meter/antenna)	\$ 250	\$ n/a
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 wastewater treatment 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 is based on different sources of future funding: Virginia Clean Water Revolving Fund, Water Infrastructure Finance and Innovation Act (WIFIA), interim financing and revenue bonds. Interest rates are based on known rates or historical averages.

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 and Revenue Policy. The Financial Policy and Revenue Policy are available at <http://www.hrsd.com/finance>

HRSD's Rate Schedule is available at <http://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

Adjusted Days Cash on Hand: Days Cash on Hand that excludes accrued debt service, the Risk Reserve, the Renewal and Replacement Reserve, and cash budgeted for the CIP in the next fiscal year.

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 locality 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 unrestricted cash and investments, plus any restricted cash and investments, if available for general system purposes, divided by Operating Expenses, divided by 365.

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.



Financial Forecast

Financial Forecast (in thousands) 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041

Operating Budget Forecast																				
<i>Projected Annual Water Consumption Decline</i>																				
<i>Projected Wastewater Rate Increase</i>																				
<i>Projected Wastewater Rate, \$/ccf</i>																				
	9.0%	9.0%	9.0%	7.0%	7.0%	7.0%	7.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	0.0%	
	\$6.39	\$6.97	\$7.60	\$8.13	\$8.70	\$9.31	\$9.73	\$10.17	\$10.63	\$11.11	\$11.61	\$12.13	\$12.68	\$13.25	\$13.85	\$14.47	\$15.12	\$15.80	\$16.51	\$17.25
Revenues																				
Operating Revenues	\$ 345,560	\$ 371,917	\$ 400,246	\$ 422,964	\$ 447,173	\$ 472,821	\$ 488,681	\$ 505,139	\$ 522,175	\$ 539,765	\$ 557,886	\$ 576,518	\$ 596,096	\$ 616,133	\$ 637,057	\$ 658,391	\$ 680,555	\$ 703,518	\$ 727,248	\$ 759,145
Non-operating Revenues	11,935	13,536	14,614	15,727	17,298	17,427	19,417	19,750	21,046	22,559	22,942	23,336	23,740	24,156	25,138	25,986	26,527	26,981	27,500	28,175
Total Revenues	357,495	385,513	414,860	438,691	464,471	490,249	508,097	524,889	543,221	562,324	580,828	599,854	619,836	640,288	662,195	684,377	707,082	730,499	754,748	787,320
Operating Expenses																				
Personal Services	62,776	64,910	67,117	69,399	71,759	74,199	76,722	79,330	82,027	84,816	87,361	89,982	92,681	95,461	98,325	101,275	104,313	107,443	110,666	113,986
Fringe Benefits	25,157	25,547	26,339	27,179	28,071	30,216	31,516	32,876	34,296	35,781	37,289	38,864	40,510	42,231	44,029	45,908	47,873	49,928	52,076	54,322
Materials And Supplies	20,106	20,858	21,638	22,448	23,287	24,158	25,062	25,999	26,971	27,980	28,819	29,684	30,574	31,492	32,438	33,410	34,412	35,444	36,508	37,603
Transportation	863	878	893	908	923	939	955	971	988	1,004	1,034	1,065	1,097	1,130	1,164	1,199	1,235	1,272	1,310	1,350
Transportation Fuels	636	647	658	669	680	692	704	716	728	740	762	785	809	833	858	884	910	937	965	995
Utilities	12,289	12,655	13,033	13,421	13,821	14,233	14,657	15,094	15,544	16,007	16,487	16,982	17,491	18,016	18,556	19,113	19,686	20,277	20,885	21,512
Chemical Purchases	8,652	8,911	9,177	9,451	9,734	10,025	10,325	10,634	10,952	11,279	11,617	11,966	12,325	12,695	13,075	13,463	13,872	14,288	14,716	15,158
Contractual Services	38,055	39,958	41,956	44,054	46,257	48,569	50,988	53,548	56,255	59,006	60,807	62,632	64,511	66,446	68,439	70,493	72,607	74,786	77,029	79,340
Consulting Services	2,243	2,355	2,472	2,596	2,726	2,862	3,005	3,156	3,313	3,479	3,583	3,691	3,802	3,916	4,033	4,154	4,279	4,407	4,539	4,675
Miscellaneous Expenses	6,716	6,905	7,100	7,301	7,508	7,720	7,939	8,165	8,397	8,636	8,895	9,162	9,437	9,720	10,011	10,312	10,621	10,940	11,268	11,606
Bond Issuance Cost	500	-	1,685	-	-	-	-	-	-	-	-	-	-	-	-	1,355	-	-	-	1,556
Capital Assets	470	484	499	514	529	545	561	578	595	613	632	651	670	690	711	732	754	777	800	824
Other Costs (SWIFT O&M, Plant Consolidation)	-	-	-	11,679	8,146	8,632	9,138	35,063	66,495	69,315	72,247	75,297	78,469	81,766	85,196	88,761	92,463	96,306	100,294	104,430
Total Operating Appropriations from Budget	178,463	184,108	192,866	198,540	217,874	222,305	231,076	240,202	275,099	315,867	326,602	337,710	349,204	361,098	388,215	411,862	427,430	440,791	456,027	473,361
Existing Debt Service	61,690	66,099	70,080	70,892	70,746	70,654	67,109	67,069	66,781	67,196	62,216	60,251	58,130	57,587	58,302	78,302	78,281	84,080	83,491	74,562
Projected Debt Service (Clean Water, WIFIA, LOC)	2,618	11,018	34,895	37,846	38,377	38,689	37,855	37,849	37,859	37,858	37,846	39,629	41,008	41,161	38,760	39,785	58,405	52,762	56,523	77,659
Total Debt Service	64,308	77,117	104,975	108,738	109,123	109,342	104,964	104,918	104,640	105,054	100,062	99,880	99,138	98,748	117,061	118,087	136,686	136,842	140,014	152,221
Transfer to Risk Management Reserve	260	131	135	139	143	147	152	156	161	166	171	176	181	187	192	198	204	210	216	223
Transfer to General Reserve (Unrestricted Cash)	-	2,671	5,674	19,334	4,431	8,771	9,126	34,896	40,768	10,735	11,108	11,494	11,894	27,117	23,647	15,668	13,361	15,237	17,334	17,334
Transfer to Capital Improvement Plan (PAYGO)	114,464	124,157	114,213	125,600	117,997	154,024	163,135	170,486	128,425	100,469	143,259	150,981	159,819	168,362	129,609	130,583	127,195	139,296	143,253	144,181
Total Appropriations for Debt Service and Transfers	179,032	201,405	221,994	240,150	246,597	262,944	277,022	284,687	268,123	246,457	254,226	262,144	270,632	279,190	273,980	272,515	279,652	289,706	298,721	313,959
Total Appropriations	\$ 357,495	\$ 385,513	\$ 414,860	\$ 438,691	\$ 464,471	\$ 490,249	\$ 508,097	\$ 524,889	\$ 543,221	\$ 562,324	\$ 580,828	\$ 599,854	\$ 619,836	\$ 640,288	\$ 662,195	\$ 684,377	\$ 707,082	\$ 730,499	\$ 754,748	\$ 787,320

Capital Improvement Budget Forecast																				
Beginning Capital Reserves																				
Sources of Funds	\$ 7,530	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,856	\$ 38,240	\$ 92,962	\$ 78,183	\$ 2,933	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt funded (Revenue Bonds and Interim Financing)	-	-	285,791	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229,204	-	263,270
Va Clean Water Revolving Loan Fund	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WIFIA	40,659	86,314	169,495	149,751	75,575	75,135	99,706	82,092	49,953	21,781	10,891	15,664	36,349	89,766	45,386	-	-	-	-	-
Water Quality Improvement Fund (WQIF) Grants	-	2,500	15,000	17,500	27,500	25,000	25,000	7,500	5,000	2,500	-	-	-	-	-	-	-	-	-	-
HRSD - Cash	114,464	124,157	114,213	125,600	117,997	154,024	163,135	170,486	128,425	100,469	143,259	150,981	159,819	168,362	129,609	130,583	127,195	139,296	143,253	144,181
Reimbursements	-	2,055	7,618	9,278	7,409	8,087	7,543	1,843	-	-	-	-	-	-	-	-	-	-	-	-
Line of Credit (Negative = Paid Off)	27,347	94,974	(157,317)	17,572	6,518	(24,390)	-	-	-	-	42,917	33,356	3,832	(58,128)	25,005	89,417	(136,399)	90,704	96,747	(187,451)
Total Capital Resources	290,000	410,000	535,000	420,000	235,000	237,856	298,240	302,962	278,183	202,933	200,000	220,000	220,000	240,000						
Uses of Funds - Capital Expenditures	290,000	410,000	535,000	420,000	235,000	235,000	260,000	210,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	220,000	220,000	230,000	240,000	220,000
Ending Capital Resources	\$ -	\$ 2,856	\$ 38,240	\$ 92,962	\$ 78,183	\$ 2,933	\$ -													

Reserves Balance Forecast																				
Total Unrestricted Cash	\$ 316,554	\$ 318,848	\$ 311,710	\$ 328,909	\$ 340,784	\$ 381,388	\$ 402,278	\$ 454,297	\$ 502,015	\$ 500,214	\$ 478,660	\$ 494,732	\$ 515,246	\$ 535,870	\$ 524,427	\$ 549,245	\$ 561,629	\$ 587,301	\$ 606,711	\$ 625,196
PAYGO (includes beginning balance, if available)	121,994	124,157	114,213	125,600	117,997	154,024	165,991	208,726	200,000	178,652	146,192	150,981	159,819	168,362	129,609	130,583	127,195	139,296	143,253	144,181
Risk Reserve	4,365	4,496	4,631	4,770	4,913	5,060	5,212	5,368	5,529	5,695	5,866	6,042	6,223	6,410	6,602	6,800	7,004	7,214	7,431	7,654
Adjusted Unrestricted Cash	\$ 190,196	\$ 190,196	\$ 192,866	\$ 198,540	\$ 217,874	\$ 222,305	\$ 231,076	\$ 240,202	\$ 296,486	\$ 315,867	\$ 326,602	\$ 337,710	\$ 349,204	\$ 361,098	\$ 388,215	\$ 411,862	\$ 427,430	\$ 440,791	\$ 456,027	\$ 473,361
Daily Cost to Operate	\$ 489	\$ 504	\$ 528	\$ 544	\$ 597	\$ 609	\$ 633	\$ 658	\$ 754	\$ 865	\$ 895	\$ 925	\$ 957	\$ 989	\$ 1,064	\$ 1,128	\$ 1,171	\$ 1,208	\$ 1,249	\$ 1,297
Adjusted Days Cash on Hand (excludes PAYGO and Risk)	389 days	377 days	365 days	393 days	365 days															

Financial Ratios Forecast																				
Total Debt Service Coverage (GAAP)	2.23	2.28	1.83	1.80	1.90	2.08	2.36	2.56	2.47	2.29	2.37	2.55	2.61	2.66	2.14	2.11	1.88	1.90	1.90	2.02
Total Debt Service Coverage (Adjusted)	2.33	2.44	1.96	1.87	2.02															

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Operating Budget



Operating Budget

	FY-2022	Adopted FY-2021	Increase/ (Decrease)	Percent Change
Operating Revenues				
Wastewater Treatment Charges	\$ 344,370,000	\$ 320,035,000	\$ 24,335,000	8%
Miscellaneous	1,190,000	1,140,000	50,000	4%
Total Operating Revenue	345,560,000	321,175,000	24,385,000	8%
Non-Operating Revenues				
Wastewater Facility Charges	7,320,000	6,160,000	1,160,000	19%
Investment Earnings	1,210,000	1,510,000	(300,000)	(20%)
Build America Bond Subsidy	2,095,000	2,292,000	(197,000)	(9%)
Other	1,310,000	1,260,000	50,000	4%
Total Non-Operating Revenues	11,935,000	11,222,000	713,000	6%
Total Revenues	\$ 357,495,000	\$ 332,397,000	\$ 25,098,000	8%
Operating Appropriations				
General Management	\$ 465,516	\$ 466,020	\$ (504)	(0%)
Communications	456,003	472,519	(16,516)	(3%)
Finance	15,303,085	15,061,142	241,943	2%
Information Technology	16,711,258	16,719,711	(8,453)	(0%)
Talent Management	2,532,647	2,574,769	(42,122)	(2%)
Operations	111,349,610	110,546,153	803,457	1%
Engineering	7,108,883	6,521,954	586,929	9%
Water Quality	15,896,141	15,676,912	219,229	1%
General Expenses	8,639,727	7,736,886	902,841	12%
Total Operating Appropriations	178,462,870	175,776,066	2,686,804	2%
Appropriations for Debt Service and Transfers				
Debt Service	64,308,209	61,407,822	2,900,387	5%
Transfer to Capital Improvement Program (CIP)	114,463,921	94,953,112	19,510,809	21%
Transfer to Risk Management Reserve	260,000	260,000	-	0%
Total Appropriations for Debt Service and Transfers	179,032,130	156,620,934	22,411,196	14%
Total Appropriations	\$ 357,495,000	\$ 332,397,000	\$ 25,098,000	8%

Operating Budget Summary

	General		Finance	Information		Talent		Engineering	Water	General
	Management	Communications		Technology	Management	Operations	Quality		Expenses	
Personal Services	\$ 342,585	\$ 295,334	\$ 6,290,168	\$ 5,054,686	\$ 1,620,907	\$ 35,998,001	\$ 4,439,309	\$ 8,459,559	\$ 275,506	
Fringe Benefits	83,431	\$ 94,169	2,526,643	1,652,512	606,870	15,394,579	1,576,016	3,424,426	(201,900)	
Materials & Supplies	10,000	\$ 45,000	104,205	1,099,750	56,500	5,752,726	38,547	1,623,700	26,000	
Transportation	7,000	\$ 8,500	8,100	12,700	27,600	1,385,430	23,270	26,206	-	
Utilities	-	\$ -	323,000	1,176,000	-	10,347,561	-	2,700	440,000	
Chemical Purchases	-	\$ -	-	-	-	8,651,935	-	-	-	
Contractual Services	9,000	\$ -	5,778,819	6,292,500	22,000	22,260,313	912,241	1,700,500	7,500,221	
Major Repairs	-	\$ -	-	1,125,000	-	10,148,820	-	76,000	-	
Capital Assets	-	\$ -	-	-	-	470,000	-	-	-	
Miscellaneous Expense	13,500	\$ 13,000	272,150	298,110	198,770	940,245	119,500	583,050	599,900	
Operating Appropriations	\$ 465,516	\$ 456,003	\$ 15,303,085	\$ 16,711,258	\$ 2,532,647	\$ 111,349,610	\$ 7,108,883	\$ 15,896,141	\$ 8,639,727	

Full-time Positions:

Current	2	3	102	49	17	534	45	118
Changes	-	-	-	2	-	(1)	-	1
Budgeted	2	3	102	51	17	533	45	119

Operating Budget Summary

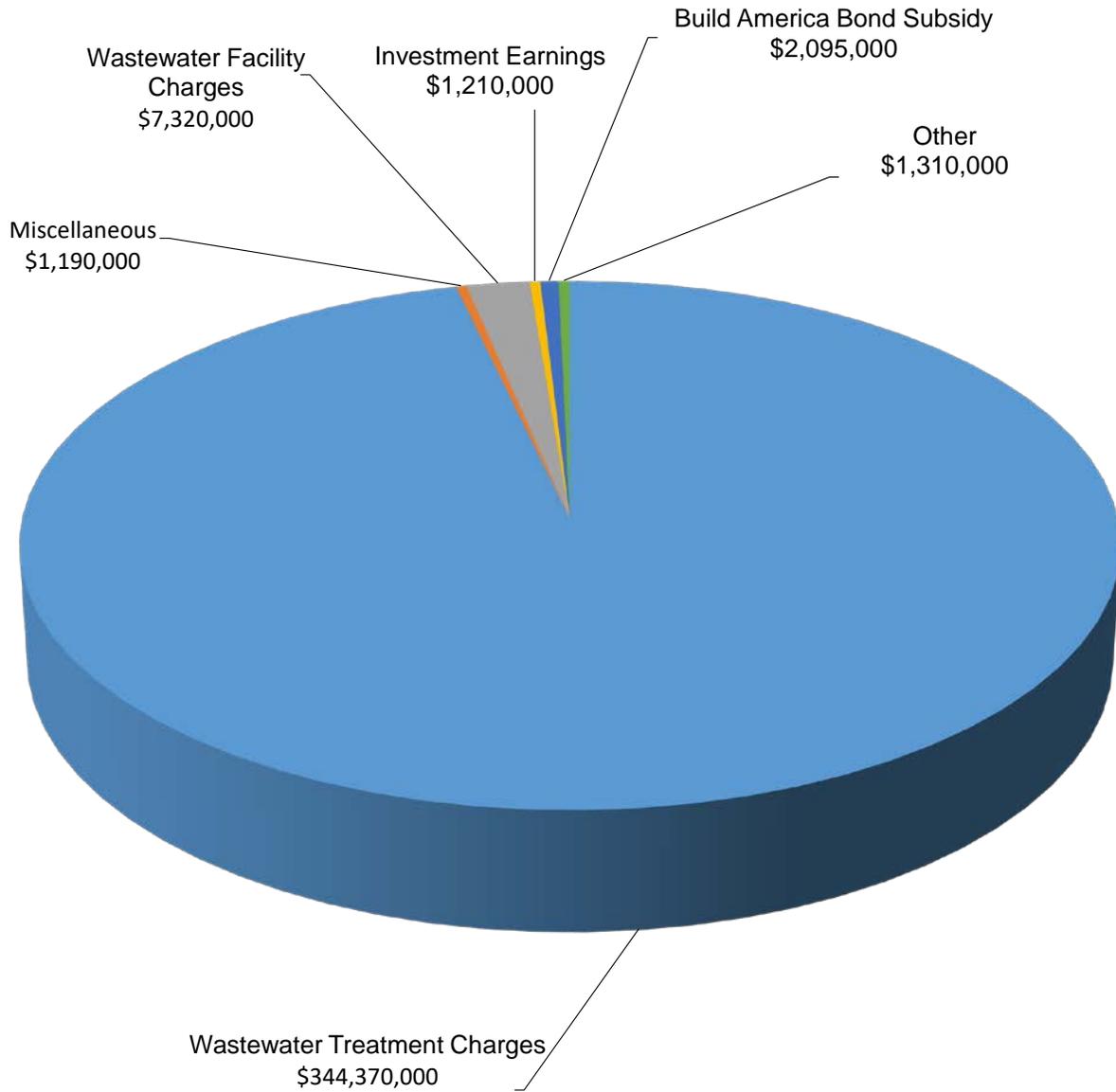
	FY-2022	Percent of Budget	FY-2021 Budget	Increase/ Decrease	Percent Inc/(Dec)
Personal Services	\$ 62,776,055	17.6%	\$ 60,952,503	\$ 1,823,552	3%
Fringe Benefits	25,156,746	7.0%	24,930,765	225,981	1%
Materials & Supplies	8,756,428	2.4%	9,067,856	(311,428)	(3%)
Transportation	1,498,806	0.4%	1,578,011	(79,205)	(5%)
Utilities	12,289,261	3.4%	12,954,307	(665,046)	(5%)
Chemical Purchases	8,651,935	2.4%	10,288,858	(1,636,923)	(16%)
Contractual Services	44,475,594	12.4%	41,786,166	2,689,428	6%
Major Repairs	11,349,820	3.2%	10,075,960	1,273,860	13%
Capital Assets	470,000	0.1%	600,000	(130,000)	(22%)
Miscellaneous Expense	3,038,225	0.8%	3,541,640	(503,415)	(14%)
Operating Appropriations	<u>\$ 178,462,870</u>	49.9%	<u>\$ 175,776,066</u>	<u>\$ 2,686,804</u>	2%
Debt Service Costs	\$ 64,308,209	18.0%	\$ 61,407,822	\$ 2,900,387	5%
Transfer to Capital Improvement Program (CIP)	114,463,921	32.0%	94,953,112	19,510,809	21%
Transfer to Risk Management	260,000	0.1%	260,000	\$ -	0%
Appropriations for Debt Service and Transfers	<u>\$ 179,032,130</u>	50.1%	<u>\$ 156,620,934</u>	<u>\$ 22,411,196</u>	14%
	<u>\$ 357,495,000</u>	100.0%	<u>\$ 332,397,000</u>	<u>\$ 25,098,000</u>	8%

Full-time Positions:

Current	870
Changes	2
Budgeted	872

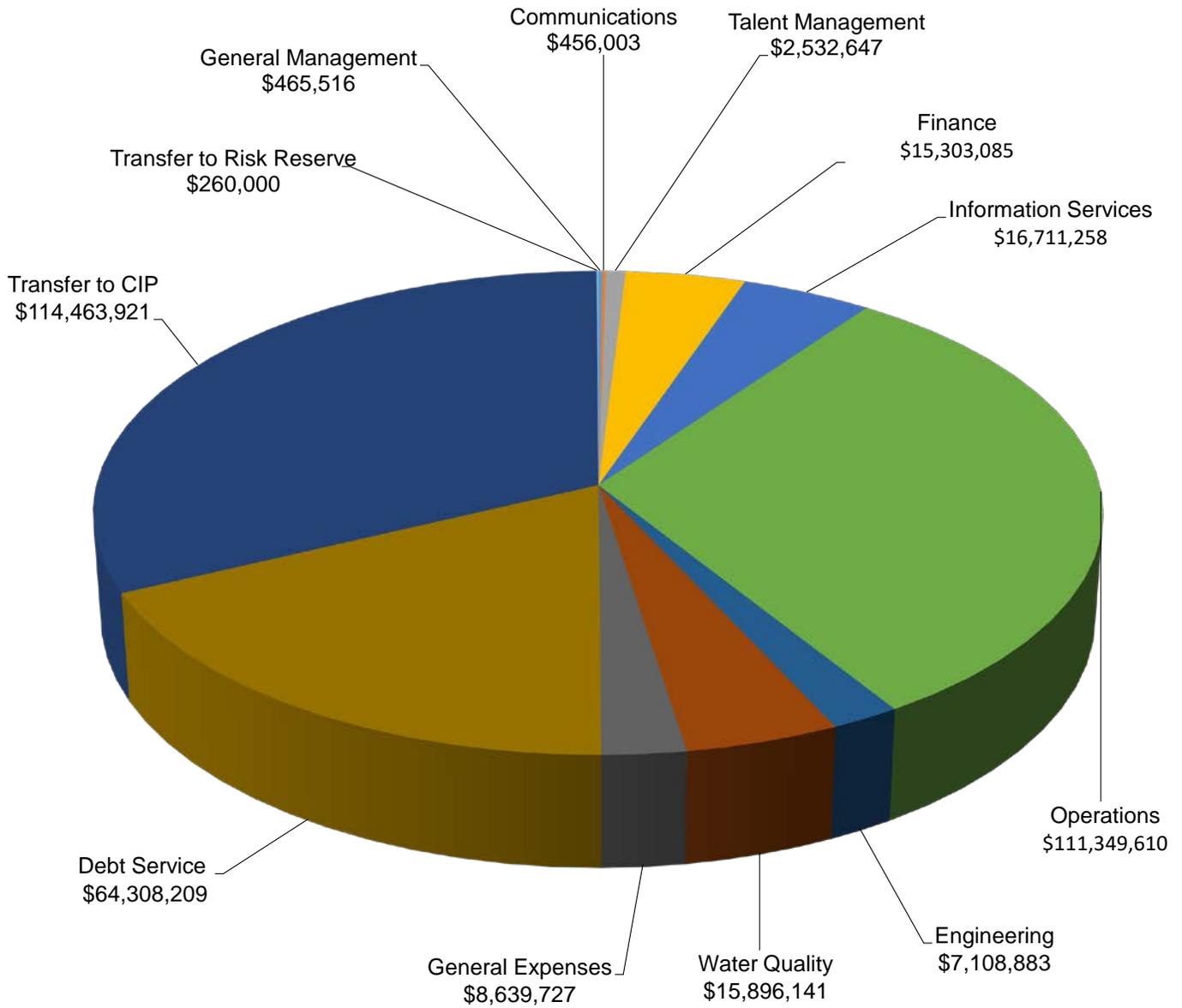
Operating Budget Charts

Revenues and Transfers In \$357,495,000



Operating Budget Charts

Expenses and Transfers Out \$357,495,000



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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 342,585	\$ 335,927	\$ 6,658	2%
Fringe Benefits	83,431	83,593	(162)	(0%)
Material & Supplies	10,000	10,000	-	0%
Transportation	7,000	7,000	-	0%
Contractual Services	9,000	9,000	-	0%
Miscellaneous	13,500	20,500	(7,000)	(34%)
Total	\$ 465,516	\$ 466,020	\$ (504)	(0%)

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
General Manager		1		1		1
Commission Secretary	6	1		1		1
Total		2	0	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 communications strategy, internal and external communications, media relations and branding through numerous channels and resources - including publications, traditional media, social media and web, graphic design, speaking engagements, tours, and special events.

Expenditure Budget

	FY-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 295,334	\$ 304,517	\$ (9,183)	(3%)
Fringe Benefits	94,169	96,002	(1,833)	(2%)
Material & Supplies	45,000	45,000	-	0%
Transportation	8,500	9,000	(500)	(6%)
Contractual Services	-	2,000	(2,000)	(100%)
Miscellaneous	13,000	16,000	(3,000)	(19%)
Total	\$ 456,003	\$ 472,519	\$ (16,516)	(3%)

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
Director of Communications	12	1		1		1
Public Information Specialist	6	1		1		1
Community Education and Outreach Specialist	6	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 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 and prepares the annual Capital Improvement Program update as part of the budget process. The Compliance and Risk Division ensures all financial related regulations, covenants and requirements are met and manages all of HRSD's property and casualty insurance programs. 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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 6,290,168	\$ 6,160,559	\$ 129,609	2%
Fringe Benefits	2,526,643	2,651,686	(125,043)	(5%)
Material & Supplies	104,205	72,213	31,992	44%
Transportation	8,100	7,850	250	3%
Utilities	323,000	279,000	44,000	16%
Contractual Services	5,778,819	5,633,530	145,289	3%
Miscellaneous	272,150	256,304	15,846	6%
Total	\$ 15,303,085	\$ 15,061,142	\$ 241,943	2%

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
Director of Finance	12	1		1		1
Chief of Accounting & Finance	11	1		1		1
Chief of Compliance & Risk	11	0	1	1		1
Chief of Customer Care Center	11	1		1		1
Chief of Procurement	11	1		1		1
Accounting Manager	9	3		3		3
Capital Program Manager	9	1		1		1
Customer Technology Manager	9	2		2		2
Customer Care Manager	9	2		2		2
Business Analyst	8	3		3		3
Financial Analyst	8	2		2		2
Procurement Analyst	8	2		2		2
Capital Program Analyst	7	1		1		1
Customer Care Supervisor	7	4		4		4
Delinquency Management Analyst	7	1		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	1	5		5
Accounting Coordinator	4	1		1		1
Accounts Receivable Technician	4	3		3		3
Customer Care Administrative Coordinator	4	1		1		1
Customer Care Coordinator	4	4		4		4
Procurement Coordinator	4	1		1		1
Account Investigator	3	11		11		11
Accounts Payable Associate	3	3		3		3
Customer Care Account Representative	3	40	(2)	38		38
Procurement Administrative Assistant	3	2		2		2
Mail Processing Clerk	2	2		2		2
Total		102	0	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 Cybersecurity Division is responsible for ensuring the safety, integrity, and availability of all HRSD information systems and business data. The Enterprise Data Services Division is responsible for application integration and support, data management, and systems analysis and support. 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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 5,054,686	\$ 4,828,740	\$ 225,946	5%
Fringe Benefits	1,652,512	1,621,071	31,441	2%
Material & Supplies	1,099,750	994,250	105,500	11%
Transportation	12,700	23,700	(11,000)	(46%)
Utilities	1,176,000	1,340,000	(164,000)	(12%)
Contractual Services	6,292,500	6,333,050	(40,550)	(1%)
Major Repairs	1,125,000	1,250,000	(125,000)	(10%)
Miscellaneous	298,110	328,900	(30,790)	(9%)
Total	\$ 16,711,258	\$ 16,719,711	\$ (8,453)	(0%)

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
Director of Information Technology	12	1		1		1
Chief Information Security Officer	11	1		1		1
Chief of Enterprise Data Services	11	1		1		1
Chief of IT Operations and Support	11	1	(1)	0		0
Database Administrator	9	3		3		3
Enterprise Architect	9	3		3		3
IT Systems Security Manager	9	1		1		1
Oracle Developer	9	2		2		2
Programming Development Manager	9	1		1		1
Senior Systems Engineer	9	7		7		7
Systems Analysis Manager	9	1		1		1
Senior Programmer Analyst	8	8		8		8
Senior Systems Analyst	8	3		3	2	5
SharePoint Web Developer	8	1		1		1
Linux 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	6	1		1		1
Telecommunications Coordinator	5	0	1	1		1
IT Administrative Coordinator	4	1		1		1
Telecommunications Support Coordinator	4	1	(1)	0		0
Computer Operator	3	3		3		3
Total		50	(1)	49	2	51

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, and administers employee benefits and workers compensation. The Organizational Development and Training (ODT) Division oversees training and the apprenticeship program. The Safety Division monitors risk, conducts safety training and works to ensure employee safety.

Expenditure Budget

	FY-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 1,620,907	\$ 1,577,738	\$ 43,169	3%
Fringe Benefits	606,870	631,674	(24,804)	(4%)
Material & Supplies	56,500	58,500	(2,000)	(3%)
Transportation	27,600	28,500	(900)	(3%)
Contractual Services	22,000	41,000	(19,000)	(46%)
Miscellaneous	198,770	237,357	(38,587)	(16%)
Total	\$ 2,532,647	\$ 2,574,769	\$ (42,122)	(2%)

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
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	3		3		3
Industrial Hygienist	8	2		2		2
Training Superintendent	8	1		1		1
ODT Resource Specialist	6	1		1		1
Safety Technician	5	2		2		2
Human Resources Coordinator	4	2		2		2
ODT Coordinator	4	1		1		1
Total		17	0	17	0	17

Operations Department

The Operations Department is responsible for operating and maintaining HRSD's treatment plants, pump stations, pipelines, buildings and equipment. HRSD provides wastewater treatment services for over 1.7 million people in 20 cities, counties and towns. The department includes the Division of Water Technology and Research whose primary purpose is to research new technologies with a focus on rapid deployment of innovative solutions and water quality. Services are delivered through 11 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 the associated sewer collection systems for four counties on the Middle Peninsula and the Town of West Point. The SCD – Surry includes the operation of two treatment plants and the associated sewer collection systems in the County of Surry. The SCD – Eastern Shore includes the operation of two treatment plants and the associated sewer collection services for the Towns of Nassawadox and Onancock. 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 of the HRSD fleet, all buildings, operation of two carpentry shops, a full-service machine shop and managing an infrastructure assessment team. 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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 35,998,001	\$ 35,856,970	\$ 141,031	0%
Fringe Benefits	15,394,579	15,788,890	(394,311)	(2%)
Material & Supplies	5,752,726	6,301,473	(548,747)	(9%)
Transportation	1,385,430	1,439,620	(54,190)	(4%)
Utilities	10,347,561	10,852,607	(505,046)	(5%)
Chemical Purchases	8,651,935	10,288,858	(1,636,923)	(16%)
Contractual Services	22,260,313	19,632,815	2,627,498	13%
Major Repairs	10,148,820	8,738,360	1,410,460	16%
Capital Assets	470,000	600,000	(130,000)	(22%)
Miscellaneous	940,245	1,046,560	(106,315)	(10%)
Total	\$ 111,349,610	\$ 110,546,153	\$ 803,457	1%

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
Director of Operations	12	1		1		1
Director of Water Technology and Research	12	1		1		1
Chief of Electrical & Instrumentation Division	11	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	1		1		1
Treatment Process Engineer	10	5	0	5		5
Electrical Manager	9	1		1		1
Industrial Automation Manager	9	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	1	3		3
Support Systems Manager	9	1		1		1
SWIFT Project Manager	9	1		1		1
Systems Manager	9	2		2		2
Automotive Superintendent	8	1		1		1
Coating, Concrete and Roofing Chief Inspector	8	1		1		1
Condition Assessment Superintendent	8	1		1		1
Electrical & Instrumentation Superintendent	8	5		5		5
Facility Superintendent	8	1		1		1
Industrial Automation Programmer	8	6		6		6
Interceptor Superintendent	8	2		2		2
Plant Superintendent	8	18		18	(1)	17

Operations Department Positions (continued)

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
Chief Foreman	7	2		2		2
Chief Maintenance Management	7	2		2		2
Chief Systems Operator	7	2		2		2
Electrical & Instrumentation Process Specialist	7	1		1		1
Electrical & Instrumentation Specialist	7	64		64		64
Interceptor Specialist	7	0	2	2		2
Lead Operator	7	33		33		33
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
Interceptor Foreman	6	7		7		7
Interceptor Inspector	6	4	(2)	2		2
Interceptor Systems Supervisor	6	2		2		2
Machinist Foreman	6	1		1		1
Maintenance Planner	6	7		7		7
Pump Station Supervisor	6	2		2		2
Automotive Technician	5	5		5		5
Carpenter	5	4		4		4
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	69	1	70	(1)	69
Plant Operator	5	78	7	85	(3)	82
Automotive Coordinator	4	1		1		1
Heavy Equipment Operator 1	4	19		19		19
Materials Operations Coordinator	4	2		2		2
Operations Admin Coordinator	4	1		1		1
Operations Coordinator	4	2		2		2
Plant Administrative Assistant	3	0	9	9	1	10
Utility Administrative Assistant	3	1		1		1
SCADA Administrative Assistant	3	1		1		1
Interceptor Assistant	2	28		28		28
Maintenance Operations Assistant	2	46	(1)	45	(1)	44
Plant Clerk	2	9	(9)	0		0
Facility Assistant	1	1		1		1
Custodian	1	4		4		4
Subtotal - Operations		503	8	511	(5)	506
Small Communities						
Systems Manager	9	1		1		1
Systems Superintendent	8	1		1	1	2
Systems Chief Foreman	7	1		1		1
Systems Lead Operator	7	3		3		3
Systems Foreman	6	1		1	1	2
Systems Operator	5	10		10	2	12
Administrative Coordinator	4	1		1		1
Heavy Equipment Operator 1	4	1		1		1
Maintenance Operations Assistant	2	3		3		3
SCD Lab Assistant	2	1		1		1
Facility Assistant	1	0		0		0
Subtotal - Small Communities		23	0	23	4	27
Total		526	8	534	(1)	533

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), Condition Assessment, and Emergency Management procedures to extend the life of assets at the lowest life cycle cost. The Design and Construction Divisions deliver capital projects in a manner consistent with HRSD's quality standards. The Planning and Analysis Division manages numerous diverse functions including 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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 4,439,309	\$ 4,063,953	\$ 375,356	9%
Fringe Benefits	1,576,016	1,497,746	78,270	5%
Material & Supplies	38,547	42,320	(3,773)	(9%)
Transportation	23,270	26,635	(3,365)	(13%)
Contractual Services	912,241	707,681	204,560	29%
Miscellaneous	119,500	183,619	(64,119)	(35%)
Total	\$ 7,108,883	\$ 6,521,954	\$ 586,929	9%

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
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
Condition Assessment Manager	9	2		2		2
Data Analysis Manager	9	1		1		1
Enterprise Data Scientist	9	0	1	1		1
GIS Manager	9	1		1		1
Hydraulic Analysis Manager	9	4		4		4
Project Manager	9	10		10		10
Real Estate Manager	8	2		2		2
CMMS Analyst	7	2		2		2
Data Analyst	7	5		5		5
GIS Analyst	7	2		2		2
Planning Engineer	7	2		2		2
Contract Specialist	6	3		3		3
GIS CAD Technician	5	2		2		2
Administrative Coordinator	4	1		1		1
Engineering Clerk	2	1		1		1
Total		44	1	45	0	45

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 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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 8,459,559	\$ 8,324,104	\$ 135,455	2%
Fringe Benefits	3,424,426	3,346,602	77,824	2%
Material & Supplies	1,623,700	1,518,100	105,600	7%
Transportation	26,206	35,706	(9,500)	(27%)
Utilities	2,700	2,700	-	0%
Contractual Services	1,700,500	1,726,700	(26,200)	(2%)
Major Repairs	76,000	87,600	(11,600)	(13%)
Miscellaneous	583,050	635,400	(52,350)	(8%)
Total	\$ 15,896,141	\$ 15,676,912	\$ 219,229	1%

Positions

	Grade	Adopted FY-2021	Adjustments	Final FY-2021	Adjustments	FY-2022
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
TSD Geologist	10	1		1		1
Environmental Scientist	9	7		7		7
Lab Manager	9	4		4		4
Lab Quality Assurance Manager	9	1		1		1
LIMS Optimization Manager	9	1		1		1
P3 Manager	9	4		4		4
WQ/Ops Quality Assurance Manager	9	1		1		1
Lab EDMS Administrator	8	1		1		1
Lab Operations Manager	8	1		1		1
Lab Supervising Chemist	8	13		13		13
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
P3 PIMS Analyst	7	1		1		1
TSD Specialist	7	12		12		12
Lab EDMS Analyst	6	1		1		1
Lab Quality Assurance Specialist	6	1		1		1
Lab Specialist	6	14		14		14
P3 Specialist	6	4		4	1	5
Lab Data Technician	5	1		1		1
Lab Technician	5	5		5		5
P3 Administrative Technician	5	1		1		1
P3 Technician	5	10		10		10
TSD Technician	5	8		8		8
CEL Operations Coordinator	4	1		1		1
Lab Assistant	4	0	7	7		7
Lab Data 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
Lab Assistant	2	7	(7)	0		0
TSD Assistant	2	1		1		1
Total		118	0	118	1	119

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-2022 Budget	FY-2021 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	\$ 275,506	\$ (500,005)	\$ 775,511	(155%)
Fringe Benefits	(201,900)	(786,499)	584,599	(74%)
Material & Supplies	26,000	26,000	-	0%
Utilities	440,000	480,000	(40,000)	(8%)
Contractual Services	7,500,221	7,700,390	(200,169)	(3%)
Miscellaneous	599,900	817,000	(217,100)	(27%)
Total General Expenses	\$ 8,639,727	\$ 7,736,886	\$ 902,841	12%
Publically Sold Bonds - Principal	\$ 22,430,000	\$ 21,545,000	\$ 885,000	4%
Publically Sold Bonds - Interest	22,730,000	23,759,200	(1,029,200)	(4%)
VCWRLF Bonds	19,148,209	16,103,622	3,044,587	19%
<i>Subtotal - Debt Service</i>	<u>64,308,209</u>	<u>61,407,822</u>	<u>2,900,387</u>	5%
Transfer to CIP	114,463,921	94,953,112	19,510,809	21%
Transfer to General Reserve	-	-	-	0%
Transfer to Risk Management	260,000	260,000	-	0%
<i>Subtotal - Transfers</i>	<u>114,723,921</u>	<u>95,213,112</u>	<u>19,510,809</u>	20%
Total Debt Service and Transfers	\$ 179,032,130	\$ 156,620,934	\$ 22,411,196	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-2022 in the amount of \$290 million. The remaining years (FY-2023 to FY-2031) 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-2022 to FY-2031 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 \$3.0 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 and the Environmental Protection Agency
- 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-2022					
	to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025	FY-2026
Beginning Capital Reserves	\$ 190,854	\$ -	\$ -	\$ -	\$ -	\$ -
Bonds	285,791	-	-	285,791	-	-
VCWRLF	400,000	100,000	100,000	100,000	100,000	-
WIFIA	850,460	40,659	86,314	169,494	149,751	75,575
WQIF	127,500	-	2,500	15,000	17,500	27,500
Grants and Other Reimbursements	48,677	-	2,055	7,818	9,278	7,409
Cash	1,320,500	121,994	124,157	114,213	125,600	117,997
Transfer from Line of Credit	(34,995)	27,347	94,974	(157,316)	17,871	6,519
Total Capital Resources	3,188,787	290,000	410,000	535,000	420,000	235,000
Capital Expenditures	2,995,000	290,000	410,000	535,000	420,000	235,000
Ending Capital Reserves	\$ 193,787	\$ -	\$ -	\$ -	\$ -	\$ -

Capital Expenditures (in thousands)	Total FY-2022					
	to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025	FY-2026
Administration	\$ 16,186	\$ 3,750	\$ 3,659	\$ 4,537	\$ 4,239	\$ -
Army Base	17,970	6,567	6,381	5,022	-	-
Atlantic	77,729	12,119	18,754	23,398	11,962	7,485
Boat Harbor	273,563	41,379	46,859	74,549	52,827	16,741
Chesapeake-Elizabeth	24,739	6,997	3,978	2,586	2,367	2,859
Eastern Shore	24,630	4,394	6,051	2,885	5,000	545
James River	257,741	32,339	70,135	81,947	59,844	13,475
Middle Peninsula	106,433	18,276	30,437	29,355	6,836	7,305
Nansemond	343,124	35,520	46,578	102,990	98,085	28,567
Surry	29,442	15,959	7,566	2,343	3,541	33
Virginia Initiative Plant	172,362	24,536	48,749	41,265	13,928	7,897
Williamsburg	12,706	4,299	3,812	856	-	-
York River	55,784	12,164	14,886	9,723	10,399	7,575
General	1,248,254	71,701	94,116	128,068	128,733	128,723
Future Improvements	217,014	-	-	-	2,239	2,604
Sub-Total	2,877,675	290,000	401,961	509,524	400,000	223,810
Contingency	117,325	-	8,039	25,476	20,000	11,190
Total Expenditures	\$ 2,995,000	\$ 290,000	\$ 410,000	\$ 535,000	\$ 420,000	\$ 235,000

Capital Budget

CIP Budget Forecast (in thousands)	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
Beginning Capital Reserves	\$ -	\$ 2,856	\$ 38,240	\$ 92,962	\$ 56,796
Bonds	-	-	-	-	-
VCWRLF	-	-	-	-	-
WIFIA	75,135	99,706	82,092	49,953	21,781
WQIF	25,000	25,000	7,500	5,000	2,500
Grants and Other Reimbursements	8,087	7,543	4,644	1,843	-
Cash	154,024	163,135	170,486	107,038	121,856
Transfer from Line of Credit	(24,390)				
Total Capital Resources	237,856	298,240	302,962	256,796	202,933
Capital Expenditures	235,000	260,000	210,000	200,000	200,000
Ending Capital Reserves	\$ 2,856	\$ 38,240	\$ 92,962	\$ 56,796	\$ 2,933

Capital Expenditures (in thousands)	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
Administration	\$ -	\$ -	\$ -	\$ -	\$ -
Army Base	-	-	-	-	-
Atlantic	1,321	303	508	-	1,880
Boat Harbor	37,273	3,934	-	-	-
Chesapeake-Elizabeth	3,476	2,477	-	-	-
Eastern Shore	5,455	300	-	-	-
James River	-	-	-	-	-
Middle Peninsula	7,736	4,644	1,843	-	-
Nansemond	4,739	13,407	9,451	3,780	7
Surry	-	-	-	-	-
Virginia Initiative Plant	1,826	10,603	11,022	9,383	3,153
Williamsburg	-	-	-	-	3,739
York River	1,037	-	-	-	-
General	160,173	209,258	173,308	105,834	48,340
Future Improvements	774	2,693	3,868	71,479	133,358
Sub-Total	223,810	247,619	200,000	190,476	190,476
Contingency	11,190	12,381	10,000	9,524	9,524
Total Expenditures	\$ 235,000	\$ 260,000	\$ 210,000	\$ 200,000	\$ 200,000

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2022 to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025
Administration						
AD012300	Central Environmental Laboratory Phase II	\$ 2,126	\$ 124	\$ 82	\$ 960	\$ 960
AD012310	Central Environmental Laboratory Phase II - Study	\$ 50	\$ 50	\$ -	\$ -	\$ -
AD012500	Cybersecurity Practice & Procedure Initiative	\$ 14,010	\$ 3,577	\$ 3,577	\$ 3,577	\$ 3,279
	Subtotal	\$ 16,186	\$ 3,750	\$ 3,659	\$ 4,537	\$ 4,239
Army Base						
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ 7,800	\$ 588	\$ 3,616	\$ 3,596	\$ -
AB010500	Section W Force Main Replacement	\$ 3,036	\$ 177	\$ 1,435	\$ 1,425	\$ -
AB011800	Army Base to VIP Transmission Force Main	\$ 49,930	\$ -	\$ -	\$ -	\$ -
AB011900	Army Base Treatment Plant Administration Building Renovation (2021)	\$ 1,134	\$ 1,002	\$ 130	\$ 2	\$ -
AB012000	Wards Corner Sanitary Sewer Pumping Station	\$ 6,000	\$ 4,800	\$ 1,200	\$ -	\$ -
	Subtotal	\$ 17,970	\$ 6,567	\$ 6,381	\$ 5,022	\$ -
Atlantic						
AT011520	Shipp's Corner Pressure Reducing Station Modifications	\$ 1,486	\$ 87	\$ 1,278	\$ 116	\$ -
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ 4,615	\$ 65	\$ 236	\$ 2,177	\$ 2,136
AT012920	Atlantic Treatment Plant Access Road Extension	\$ 9,654	\$ 1,123	\$ 4,084	\$ 4,447	\$ -
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ 6,050	\$ 1,856	\$ 2,784	\$ 1,264	\$ 146
AT013110	South Norfolk Area Gravity Sewer Improvements, Phase II	\$ 7,830	\$ 497	\$ 3,676	\$ 3,656	\$ -
AT013200	Doziers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	\$ 2,837	\$ -	\$ 57	\$ 425	\$ 2,356
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	\$ 351	\$ 61	\$ 61	\$ 130	\$ 100
AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ 987	\$ 395	\$ 395	\$ 197	\$ -
AT014301	Atlantic Service Area I-I Reduction Phase I (CHES)	\$ 11,911	\$ -	\$ 721	\$ 998	\$ 1,447
AT014302	Atlantic Service Area I-I Reduction Phase II (CHES)	\$ 9,770	\$ 1,045	\$ 1,728	\$ 3,806	\$ 3,185
AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ 866	\$ -	\$ -	\$ -	\$ -
AT014500	Atlantic Treatment Plant Influent Screens (1-3) Replacement	\$ 2,441	\$ 2,441	\$ -	\$ -	\$ -
AT014600	Kempsville Interceptor Force Main Replacement - Phase I	\$ 5,393	\$ 281	\$ 760	\$ 2,895	\$ 1,458
AT014800	Atlantic Treatment Plant Electrical Workspace Renovation	\$ 514	\$ 514	\$ -	\$ -	\$ -
AT014900	Atlantic Treatment Plant Gravity Belt Thickener Expansion	\$ 1,475	\$ 1,082	\$ 393	\$ -	\$ -
AT015000	Atlantic Treatment Plant Polymer System Replacement	\$ 3,375	\$ 1,902	\$ 1,473	\$ -	\$ -
AT015100	Atlantic Treatment Plant Solids Storage Pad Improvements	\$ 672	\$ 422	\$ 250	\$ -	\$ -
AT015200	Cedar Road Interceptor Force Main Replacement Phase I	\$ 5,628	\$ 349	\$ 857	\$ 3,287	\$ 1,136
AT015300	High Priority Projects Round 2 Project 2	\$ 26,850	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 77,729	\$ 12,119	\$ 18,754	\$ 23,398	\$ 11,962
Boat Harbor						
BH013020	Willard Avenue Pump Station Replacement	\$ 11,979	\$ 7,562	\$ 4,413	\$ 3	\$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ 2,391	\$ 1,040	\$ 1,352	\$ -	\$ -
BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase II	\$ 12,451	\$ 6,218	\$ 6,218	\$ 9	\$ 6
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	\$ 1,998	\$ 585	\$ 1,410	\$ 4	\$ -
BH014600	46th Street Diversion Sewer Rehabilitation Replacement	\$ 6,836	\$ 4,311	\$ 2,521	\$ 4	\$ -
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	\$ 5,722	\$ 3,611	\$ 2,109	\$ 3	\$ -
BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Walnut Avenue	\$ 6,688	\$ 6,680	\$ 8	\$ -	\$ -
BH015700	Boat Harbor Treatment Plant Pump Station Conversion	\$ 65,382	\$ 5,752	\$ 5,205	\$ 26,940	\$ 24,840
BH015710	Boat Harbor Treatment Plant Transmission Force Main Section 1 (Subaqueous)	\$ 64,498	\$ 2,394	\$ 12,637	\$ 33,375	\$ 16,092
BH015720	Boat Harbor Treatment Plant Transmission Force Main Section 2 (Land)	\$ 22,020	\$ 1,973	\$ 7,739	\$ 12,308	\$ -
BH015730	Boat Harbor Treatment Plant Decommission and Demolition	\$ 28,626	\$ -	\$ -	\$ 516	\$ 1,866
BH015801	14th Street Offline Storage (BH-HPP-01A)	\$ 15,124	\$ -	\$ 885	\$ 839	\$ 8,425
BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 11,157	\$ -	\$ -	\$ 546	\$ 766
BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ 15,071	\$ -	\$ -	\$ -	\$ 831
BH015900	Bloxoms Corner Force Main Replacement	\$ 3,620	\$ 1,254	\$ 2,362	\$ 4	\$ -
BH016100	High Priority Projects Round 2 Project 3	\$ 26,380	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 273,563	\$ 41,379	\$ 46,859	\$ 74,549	\$ 52,827
Chesapeake-Elizabeth						
CE010520	Newtown Road Interceptor Force Main Relocation	\$ 1,728	\$ 1,645	\$ 83	\$ -	\$ -
CE011300	Birchwood Trunk 24-Inch 30-Inch Force Main at Independence Boulevard Replacement Phase II	\$ 1,548	\$ 381	\$ 1,167	\$ -	\$ -
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	\$ 1,836	\$ 139	\$ 668	\$ 1,029	\$ -
CE011700	Western Trunk Force Main Replacement	\$ 83	\$ 83	\$ -	\$ -	\$ -
CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ 11,304	\$ 204	\$ 2,057	\$ 1,419	\$ 2,128
CE011821	Elbow Road Pressure Reducing Station	\$ 227	\$ 227	\$ -	\$ -	\$ -
CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ 1,088	\$ 1,088	\$ -	\$ -	\$ -
CE011825	Salem Road Interconnect Force Main	\$ 925	\$ 925	\$ -	\$ -	\$ -
CE011830	Little Creek Pump Station Modifications	\$ 6	\$ 6	\$ -	\$ -	\$ -
CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ 1,200	\$ 1,200	\$ -	\$ -	\$ -
CE011836	Norfolk City Pump Station Upgrades	\$ 615	\$ 615	\$ -	\$ -	\$ -
CE011840	Oceana Off-Line Storage Facility	\$ 82	\$ 82	\$ -	\$ -	\$ -
CE011850	Atlantic Service Area Automated Diversion Facilities Phase I	\$ 402	\$ 402	\$ -	\$ -	\$ -
CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 3,694	\$ -	\$ 3	\$ 138	\$ 239
	Subtotal	\$ 24,739	\$ 6,997	\$ 3,978	\$ 2,586	\$ 2,367
Note:	VIP - Virginia Initiative Plant VDOT - Virginia Department of Transportation IFM - Interceptor Force Main CHES - City of Chesapeake BH - Boat Harbor Treatment Plant HPP - High Priority Project					

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
Administration							
AD012300	Central Environmental Laboratory Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012310	Central Environmental Laboratory Phase II - Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AD012500	Cybersecurity Practice & Procedure Initiative	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Army Base							
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AB010500	Section W Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AB011800	Army Base to VIP Transmission Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AB011900	Army Base Treatment Plant Administration Building Renovation (2021)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AB012000	Wards Corner Sanitary Sewer Pumping Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Atlantic							
AT011520	Shipp's Corner Pressure Reducing Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT012920	Atlantic Treatment Plant Access Road Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013110	South Norfolk Area Gravity Sewer Improvements, Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013200	Doziers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014000	Lynnhaven-Great Neck IFM (SF-021) Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014301	Atlantic Service Area H-I Reduction Phase I (CHES)	\$ 7,478	\$ 1,267	\$ -	\$ -	\$ -	\$ -
AT014302	Atlantic Service Area H-I Reduction Phase II (CHES)	\$ 7	\$ -	\$ -	\$ -	\$ -	\$ -
AT014303	Chesapeake Pump Station Capacity Improvements (AT-HPP-01C)	\$ -	\$ 54	\$ 303	\$ 508	\$ -	\$ -
AT014500	Atlantic Treatment Plant Influent Screens (1-3) Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014600	Kempsville Interceptor Force Main Replacement - Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014800	Atlantic Treatment Plant Electrical Workspace Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT014900	Atlantic Treatment Plant Gravity Belt Thickener Expansion	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT015000	Atlantic Treatment Plant Polymer System Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT015100	Atlantic Treatment Plant Solids Storage Pad Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT015200	Cedar Road Interceptor Force Main Replacement Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
AT015300	High Priority Projects Round 2 Project 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,880
	Subtotal	\$ 7,485	\$ 1,321	\$ 303	\$ 508	\$ -	\$ 1,880
Boat Harbor							
BH013020	Willard Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015600	Hampton Trunk A and B Replacement-Jefferson Avenue to Walnut Avenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015700	Boat Harbor Treatment Plant Pump Station Conversion	\$ 2,645	\$ -	\$ -	\$ -	\$ -	\$ -
BH015710	Boat Harbor Treatment Plant Transmission Force Main Section 1 (Subaqueous)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015720	Boat Harbor Treatment Plant Transmission Force Main Section 2 (Land)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH015730	Boat Harbor Treatment Plant Decommission and Demolition	\$ 244	\$ 25,004	\$ 996	\$ -	\$ -	\$ -
BH015801	14th Street Offline Storage (BH-HPP-01A)	\$ 4,975	\$ -	\$ -	\$ -	\$ -	\$ -
BH015802	Claremont Pump Station Upgrade (BH-HPP-01B)	\$ 6,390	\$ 3,454	\$ -	\$ -	\$ -	\$ -
BH015803	Chesapeake Avenue Interceptor Improvements (BH-HPP-01C)	\$ 2,487	\$ 8,815	\$ 2,938	\$ -	\$ -	\$ -
BH015900	Bloxoms Corner Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BH016100	High Priority Projects Round 2 Project 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 16,741	\$ 37,273	\$ 3,934	\$ -	\$ -	\$ -
Chesapeake-Elizabeth							
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011700	Western Trunk Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011810	Chesapeake-Elizabeth Treatment Plant Decommissioning	\$ 2,128	\$ 2,128	\$ 1,241	\$ -	\$ -	\$ -
CE011821	Elbow Road Pressure Reducing Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011823	Virginia Beach Boulevard Force Main Phase VI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011825	Salem Road Interconnect Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011830	Little Creek Pump Station Modifications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011835	Virginia Beach City Pump Station Upgrades, Phase V	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011836	Norfolk City Pump Station Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011840	Oceana Off-Line Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE011850	Atlantic Service Area Automated Diversion Facilities Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CE012100	Witchduck Road Interceptor Force Main Improvements	\$ 731	\$ 1,348	\$ 1,236	\$ -	\$ -	\$ -
	Subtotal	\$ 2,859	\$ 3,476	\$ 2,477	\$ -	\$ -	\$ -
Note:	VIP - Virginia Initiative Plant VDOT - Virginia Department of Transportation IFM - Interceptor Force Main CHES - City of Chesapeake BH - Boat Harbor Treatment Plant HPP - High Priority Project						

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2022 to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025
Eastern Shore						
ES010100	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I	\$ 12,860	\$ 4,204	\$ 5,771	\$ 2,885	\$ -
ES010200	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase II	\$ 11,300	\$ -	\$ -	\$ -	\$ 5,000
ES010300	Onancock Treatment Plant Administration Building Upgrade	\$ 470	\$ 190	\$ 280	\$ -	\$ -
	Subtotal	\$ 24,630	\$ 4,394	\$ 6,051	\$ 2,885	\$ 5,000
James River						
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ 17,474	\$ 9,709	\$ 7,758	\$ 7	\$ -
JR013000	Morrison Pump Station Discharge Force Main Replacement & Capacity Enhancements	\$ 1,437	\$ 1,435	\$ 3	\$ -	\$ -
JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	\$ 2,107	\$ 160	\$ 1,776	\$ 171	\$ 1
JR013400	James River Treatment Plant Advanced Nutrient Reduction Improvements	\$ 215,992	\$ 17,862	\$ 50,187	\$ 74,628	\$ 59,840
JR013500	Lucas Creek Pump Station Replacement	\$ 9,278	\$ 1,933	\$ 4,404	\$ 2,938	\$ 3
JR013600	James River Treatment Plant Primary Treatment and Automation Improvements	\$ 11,452	\$ 1,240	\$ 6,008	\$ 4,204	\$ -
JR013700	High Priority Projects Round 2 Project 6	\$ 17,090	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 257,741	\$ 32,339	\$ 70,135	\$ 81,947	\$ 59,844
Middle Peninsula						
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ 2,520	\$ 1,149	\$ 1,149	\$ 222	\$ -
MP012000	King William Treatment Plant Improvements Phase I	\$ 1,615	\$ 1,612	\$ 3	\$ -	\$ -
MP013000	Small Communities Collection System Rehabilitation Phase I	\$ 14	\$ 14	\$ -	\$ -	\$ -
MP013020	Small Communities Collection System Rehabilitation Phase III	\$ 1,002	\$ 995	\$ 7	\$ -	\$ -
MP013300	King William Treatment Plant Improvements Phase II	\$ 13,844	\$ 518	\$ 6,650	\$ 6,650	\$ 26
MP013500	Middlesex Collection System-Cooks Corner	\$ 1,757	\$ 1,754	\$ 3	\$ -	\$ -
MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ 240	\$ 239	\$ 0	\$ -	\$ -
MP013710	Middlesex Interceptor System Program Phase II-Saluda Pump Station	\$ 1,756	\$ 213	\$ 839	\$ 703	\$ 2
MP013720	Middlesex Interceptor System Program Phase II-Hartfield Pump Station	\$ 4,272	\$ 688	\$ 1,952	\$ 1,630	\$ 2
MP013730	Middlesex Interceptor System Program Phase II-Transmission Force Main	\$ 26,922	\$ 5,041	\$ 10,938	\$ 10,938	\$ 5
MP013800	Middlesex Interceptor System Program Phase III	\$ 3,448	\$ 20	\$ 330	\$ 2,319	\$ 780
MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ 257	\$ 257	\$ -	\$ -	\$ -
MP014100	Middlesex Collection System-Christ's Church Service Area	\$ 1,043	\$ 18	\$ 18	\$ 18	\$ 18
MP014200	Middlesex Collection System-Topping Service Area Phase I	\$ 3,420	\$ 330	\$ 1,160	\$ 1,540	\$ 390
MP014300	Middlesex Collection System-Locust Hill Service Area	\$ 3,593	\$ 80	\$ 80	\$ 80	\$ 80
MP014410	Middlesex County Hartfield Collection System Phase I	\$ 551	\$ 99	\$ 214	\$ 214	\$ 22
MP014500	Middlesex Collection System-Saluda Service Area	\$ 3,015	\$ 107	\$ 107	\$ 526	\$ 1,133
MP014510	Middlesex County Saluda Collection System Phase I	\$ 139	\$ 32	\$ 51	\$ 51	\$ 5
MP014600	Middlesex Collection System-Deltaville Service Area	\$ 25,963	\$ 448	\$ 3,320	\$ 4,204	\$ 4,259
MP014700	Small Communities Rehabilitation Phase IV	\$ 1,436	\$ 1,432	\$ 4	\$ 1	\$ -
MP014800	Small Communities Rehabilitation Phase V	\$ 419	\$ 53	\$ 366	\$ -	\$ -
MP014900	Middle Peninsula Operations Center Locker Room and Administrative Facilities	\$ 1,460	\$ 1,455	\$ 5	\$ -	\$ -
MP015000	Sharon Road Gravity Sewer Improvements	\$ 1,020	\$ 1,016	\$ 4	\$ -	\$ -
MP015100	West Point Pump Station 4 (Thompson Avenue) Rehabilitation	\$ 706	\$ 313	\$ 391	\$ 3	\$ -
MP015300	King William Central Crossing Pump Station Rehabilitation	\$ 975	\$ 107	\$ 760	\$ 108	\$ -
MP015400	Middlesex Interceptor System Program Phase IV	\$ 2,527	\$ -	\$ -	\$ -	\$ 115
MP015500	Small Communities Rehabilitation Phase VI	\$ 1,210	\$ 141	\$ 1,069	\$ -	\$ -
MP015600	West Point Treatment Plant Final Effluent Pump Station Improvements	\$ 665	\$ 73	\$ 517	\$ 75	\$ -
MP015700	West Point Treatment Plant Secondary Clarifier Improvements	\$ 644	\$ 71	\$ 500	\$ 73	\$ -
	Subtotal	\$ 106,433	\$ 18,276	\$ 30,437	\$ 29,355	\$ 6,836
Nansemond						
NP010620	Suffolk Pump Station Replacement	\$ 22,151	\$ 7,860	\$ 8,575	\$ 5,716	\$ -
NP012400	Western Branch Sewer System Gravity Improvements	\$ 2,895	\$ 167	\$ 167	\$ 2,561	\$ -
NP012600	Deep Creek Interceptor Force Main Replacement	\$ 50	\$ 50	\$ -	\$ -	\$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	\$ 1,513	\$ 825	\$ 688	\$ -	\$ -
NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ 591	\$ 542	\$ 49	\$ -	\$ -
NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improvements	\$ 15,016	\$ 9,480	\$ 5,535	\$ -	\$ -
NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph II	\$ 214,610	\$ 3,716	\$ 23,471	\$ 85,588	\$ 84,401
NP013901	Nansemond Service Area I-I Reduction Phase II (CHES)	\$ 15,849	\$ -	\$ -	\$ -	\$ 262
NP013902	Nansemond Service Area I-I Reduction Phase III (CHES)	\$ 15,773	\$ -	\$ -	\$ -	\$ -
NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-03)	\$ 27,441	\$ 1,173	\$ 1,514	\$ 5,723	\$ 10,875
NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ 3,000	\$ -	\$ -	\$ -	\$ -
NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ 559	\$ 553	\$ 6	\$ -	\$ -
NP014500	Nansemond Treatment Plant Regional Residuals Facility Upgrade	\$ 1,545	\$ 1,545	\$ -	\$ -	\$ -
NP014600	West Road Interceptor Force Main Extension	\$ 7,103	\$ 218	\$ 940	\$ 3,397	\$ 2,548
NP014700	Nansemond Treatment Plant Digester Capacity Upgrade	\$ 15,027	\$ 9,390	\$ 5,633	\$ 4	\$ -
NP014800	High Priority Projects Round 2 Project 8	\$ 28,150	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 343,124	\$ 35,520	\$ 46,578	\$ 102,990	\$ 98,085
Note:	SCADA - Supervisory Control and Data Acquisition NP - Nansemond Treatment Plant CHES - City of Chesapeake					

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
Eastern Shore							
ES010100	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ES010200	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase II	\$ 545	\$ 5,455	\$ 300	\$ -	\$ -	\$ -
ES010300	Onancock Treatment Plant Administration Building Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 545	\$ 5,455	\$ 300	\$ -	\$ -	\$ -
James River							
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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	\$ 13,475	\$ -	\$ -	\$ -	\$ -	\$ -
JR013500	Lucas Creek Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR013600	James River Treatment Plant Primary Treatment and Automation Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
JR013700	High Priority Projects Round 2 Project 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 13,475	\$ -	\$ -	\$ -	\$ -	\$ -
Middle Peninsula							
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP012000	King William Treatment Plant Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013000	Small Communities Collection System Rehabilitation Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013020	Small Communities Collection System Rehabilitation Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013300	King William Treatment Plant Improvements Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013500	Middlesex Collection System-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013600	Middlesex Interceptor Force Main Phase I-Cooks Corner	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013710	Middlesex Interceptor System Program Phase II-Saluda Pump Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013720	Middlesex Interceptor System Program Phase II-Hartfield Pump Station	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013730	Middlesex Interceptor System Program Phase II-Transmission Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013800	Middlesex Interceptor System Program Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP013900	Urbanna Wastewater Treatment Plant Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP014100	Middlesex Collection System-Christ's Church Service Area	\$ 18	\$ 207	\$ 467	\$ 277	\$ -	\$ -
MP014200	Middlesex Collection System-Topping Service Area Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP014300	Middlesex Collection System-Locust Hill Service Area	\$ 1,231	\$ 1,622	\$ 420	\$ -	\$ -	\$ -
MP014410	Middlesex County Hartfield Collection System Phase I	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
MP014500	Middlesex Collection System-Saluda Service Area	\$ 1,133	\$ 10	\$ -	\$ -	\$ -	\$ -
MP014510	Middlesex County Saluda Collection System Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP014600	Middlesex Collection System-Deltaville Service Area	\$ 4,204	\$ 4,204	\$ 3,757	\$ 1,565	\$ -	\$ -
MP014700	Small Communities Rehabilitation Phase IV	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP014800	Small Communities Rehabilitation Phase V	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP014900	Middle Peninsula Operations Center Locker Room and Administrative Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015000	Sharon Road Gravity Sewer Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015100	West Point Pump Station 4 (Thompson Avenue) Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015300	King William Central Crossing Pump Station Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015400	Middlesex Interceptor System Program Phase IV	\$ 718	\$ 1,693	\$ -	\$ -	\$ -	\$ -
MP015500	Small Communities Rehabilitation Phase VI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015600	West Point Treatment Plant Final Effluent Pump Station Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MP015700	West Point Treatment Plant Secondary Clarifier Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 7,305	\$ 7,736	\$ 4,644	\$ 1,843	\$ -	\$ -
Nansemond							
NP010620	Suffolk Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP012400	Western Branch Sewer System Gravity Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP012600	Deep Creek Interceptor Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013400	Deep Creek Interceptor Force Main Risk Mitigation Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013700	Nansemond Treatment Plant Struvite Recovery Facility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP013820	Nansemond Treatment Plant Advanced Nutrient Reduction Improvements Ph II	\$ 17,434	\$ -	\$ -	\$ -	\$ -	\$ -
NP013901	Nansemond Service Area I-I Reduction Phase II (CHES)	\$ 1,601	\$ 2,961	\$ 8,255	\$ 2,772	\$ -	\$ -
NP013902	Nansemond Service Area I-I Reduction Phase III (CHES)	\$ 1,376	\$ 1,570	\$ 4,520	\$ 4,520	\$ 3,780	\$ 7
NP014000	Wilroy Pressure Reducing Station and Offline Storage (NP-HPP-03)	\$ 8,156	\$ -	\$ -	\$ -	\$ -	\$ -
NP014100	Nansemond Treatment Plant Shoreline Improvements Phase II	\$ -	\$ 209	\$ 632	\$ 2,159	\$ -	\$ -
NP014400	Nansemond Treatment Plant Influent Screen Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014500	Nansemond Treatment Plant Regional Residuals Facility Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014600	West Road Interceptor Force Main Extension	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014700	Nansemond Treatment Plant Digester Capacity Upgrade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NP014800	High Priority Projects Round 2 Project 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 28,567	\$ 4,739	\$ 13,407	\$ 9,451	\$ 3,780	\$ 7
Note:	SCADA - Supervisory Control and Data Acquisition NP - Nansemond Treatment Plant CHES - City of Chesapeake						

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2022 to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025
Surry						
SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ 21,349	\$ 14,232	\$ 7,116	\$ -	\$ -
SU010300	Surry Water and Sewer Infrastructure Improvements – Phase 1	\$ 1,426	\$ 1,426	\$ -	\$ -	\$ -
SU010400	Surry Force Main and Pump Station-Dominion Power Extension	\$ 6,667	\$ 300	\$ 450	\$ 2,343	\$ 3,541
	Subtotal	\$ 29,442	\$ 15,959	\$ 7,566	\$ 2,343	\$ 3,541
Virginia Initiative Plant						
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	\$ 3,043	\$ 165	\$ 974	\$ 1,428	\$ 476
VP014010	Ferebee Avenue Pump Station Replacement	\$ 7,565	\$ -	\$ 2,775	\$ 4,106	\$ 684
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	\$ 10,250	\$ 2,317	\$ 4,533	\$ 3,400	\$ -
VP014700	Ingleside Road Pump Station Replacement	\$ 2,969	\$ 2,969	\$ -	\$ -	\$ -
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ 3,267	\$ 381	\$ 2,886	\$ -	\$ -
VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 34,924	\$ 1,463	\$ 8,923	\$ 10,410	\$ 8,922
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ 18,342	\$ 3,963	\$ 7,843	\$ 6,536	\$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ 2,720	\$ 148	\$ 870	\$ 1,277	\$ 426
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	\$ 3,667	\$ 201	\$ 1,172	\$ 1,721	\$ 574
VP017110	Central Norfolk Area Gravity Sewer Improvements Phase I	\$ 15	\$ 15	\$ -	\$ -	\$ -
VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II	\$ 6,325	\$ 630	\$ 2,439	\$ 3,193	\$ 63
VP018000	Park Avenue Pump Station Replacement	\$ 10,380	\$ 3,490	\$ 5,168	\$ 1,723	\$ -
VP018200	Effingham Interceptor Vault Removal	\$ 2,072	\$ 1,624	\$ 448	\$ -	\$ -
VP018301	VIP Service Area I-I Reduction Phase I (PORTS)	\$ 11,564	\$ 1,546	\$ 5,713	\$ 4,305	\$ -
VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ 10,527	\$ -	\$ -	\$ -	\$ -
VP018303	VIP Service Area I-I Reduction Phase III (PORTS)	\$ 9,015	\$ 925	\$ 859	\$ 2,622	\$ 2,622
VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ 5,478	\$ -	\$ -	\$ -	\$ -
VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ 2,621	\$ -	\$ -	\$ -	\$ -
VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-HPP-05)	\$ 18,711	\$ 161	\$ 161	\$ 161	\$ 161
VP018500	Elizabeth River Crossing Reliability Improvements	\$ 1,661	\$ 1,511	\$ 150	\$ -	\$ -
VP018800	Virginia Initiative Plant Administration Building Renovation	\$ 2,462	\$ 1,671	\$ 777	\$ 13	\$ -
VP018900	Norchester Pump Station Screening Improvements	\$ 469	\$ 89	\$ 310	\$ 70	\$ -
VP019000	Colley Ave Pump Station Pump Replacement	\$ 640	\$ 64	\$ 576	\$ -	\$ -
VP019100	Virginia Initiative Plant Incinerator Burner Replacement	\$ 1,800	\$ 600	\$ 900	\$ 300	\$ -
VP019200	Virginia Initiative Plant Motor Control Center Replacements	\$ 1,875	\$ 604	\$ 1,271	\$ -	\$ -
VP019300	High Priority Projects Round 2 Project 4	\$ 12,380	\$ -	\$ -	\$ -	\$ -
VP019400	High Priority Projects Round 2 Project 5	\$ 14,940	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 172,362	\$ 24,536	\$ 48,749	\$ 41,265	\$ 13,928
Williamsburg						
WB012400	Williamsburg Treatment Plant Generator and Switchgear Replacement	\$ 335	\$ 333	\$ 2	\$ -	\$ -
WB012500	Lodge Road Pump Station Upgrades	\$ 1,489	\$ 102	\$ 532	\$ 855	\$ -
WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehabilitation	\$ 1,146	\$ 1,146	\$ -	\$ -	\$ -
WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ 2,406	\$ 2,212	\$ 193	\$ 1	\$ -
WB013000	Williamsburg Treatment Plant Intermediate Clarifier Wet Weather System	\$ 1,933	\$ 381	\$ 1,553	\$ -	\$ -
WB013100	Williamsburg Treatment Plant Outfall Flow Control System Repairs	\$ 1,657	\$ 125	\$ 1,532	\$ -	\$ -
WB013200	High Priority Projects Round 2 Project 1	\$ 53,410	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 12,706	\$ 4,299	\$ 3,812	\$ 856	\$ -
York River						
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	\$ 3,242	\$ 236	\$ 1,559	\$ 1,447	\$ -
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	\$ 4,261	\$ 322	\$ 1,438	\$ 2,496	\$ 5
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	\$ 5,807	\$ 33	\$ 60	\$ 529	\$ 1,663
YR010900	Tabb Pressure Reducing Station and Offline Storage Facility	\$ 17,004	\$ 2,711	\$ 10,716	\$ 3,577	\$ -
YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ 405	\$ 97	\$ 194	\$ 113	\$ -
YR013710	York River Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ 200	\$ 200	\$ -	\$ -	\$ -
YR013900	York River System Isolation Valve Installation and Replacement	\$ 4,452	\$ 4,452	\$ -	\$ -	\$ -
YR014000	York River Treatment Plant Administration Building Renovation	\$ 1,912	\$ 1,364	\$ 547	\$ 1	\$ -
YR014100	Coliseum Pressure Reducing Station Enhanced Storage	\$ 8,031	\$ -	\$ -	\$ 559	\$ 5,271
YR014200	LaSalle Avenue Boat Harbor to York River Interconnect Force Main	\$ 6,948	\$ 41	\$ -	\$ 557	\$ 3,461
YR014300	Bethel-Poquoson Force Main Phase II (Wythe Creek Road) Replacement	\$ 2,493	\$ 2,488	\$ 5	\$ -	\$ -
YR014500	York River Treatment Plant Headworks Motor Control Center Replacement	\$ 184	\$ 184	\$ -	\$ -	\$ -
YR014600	Bethel-Poquoson Force Main Part IV Replacement-Wythe Creek Exposed Crossing	\$ 845	\$ 35	\$ 366	\$ 444	\$ -
	Subtotal	\$ 55,784	\$ 12,164	\$ 14,886	\$ 9,723	\$ 10,399
Note:	PORTS - City of Portsmouth VIP - Virginia Initiative Plant HPP - High Priority Project					

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
Surry							
SU010200	Surry Hydraulic Improvements and Interceptor Force Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SU010300	Surry Water and Sewer Infrastructure Improvements – Phase 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SU010400	Surry Force Main and Pump Station-Dominion Power Extension	\$ 33	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 33	\$ -	\$ -	\$ -	\$ -	\$ -
Virginia Initiative Plant							
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP014010	Ferebee Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP014700	Ingleside Road Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP015320	Larchmont Area Sanitary Sewer Improvements	\$ 5,205	\$ -	\$ -	\$ -	\$ -	\$ -
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP017110	Central Norfolk Area Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018000	Park Avenue Pump Station Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018200	Effingham Interceptor Vault Removal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018301	VIP Service Area I-I Reduction Phase I (PORTS)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018302	Portsmouth Pump Station Upgrades (VIP-HPP-04B)	\$ 289	\$ 762	\$ 6,178	\$ 3,298	\$ -	\$ -
VP018303	VIP Service Area I-I Reduction Phase III (PORTS)	\$ 1,986	\$ -	\$ -	\$ -	\$ -	\$ -
VP018304	Camden Avenue Pump Station Upgrades (VIP-HPP-04D)	\$ 211	\$ 254	\$ 2,095	\$ 2,918	\$ -	\$ -
VP018305	Camden Avenue Gravity Improvements (VIP-HPP-04E)	\$ 45	\$ 242	\$ 1,677	\$ 656	\$ -	\$ -
VP018400	State Street Pressure Reducing Station and Offline Storage (VIP-HPP-05)	\$ 161	\$ 569	\$ 652	\$ 4,149	\$ 9,383	\$ 3,153
VP018500	Elizabeth River Crossing Reliability Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018800	Virginia Initiative Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP018900	Norchester Pump Station Screening Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP019000	Colley Ave Pump Station Pump Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP019100	Virginia Initiative Plant Incinerator Burner Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP019200	Virginia Initiative Plant Motor Control Center Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP019300	High Priority Projects Round 2 Project 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
VP019400	High Priority Projects Round 2 Project 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 7,897	\$ 1,826	\$ 10,603	\$ 11,022	\$ 9,383	\$ 3,153
Williamsburg							
WB012400	Williamsburg Treatment Plant Generator and Switchgear Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012500	Lodge Road Pump Station Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012600	Kingsmill Pump Station Piping Replacement and Wet Well Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB012900	Williamsburg Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB013000	Williamsburg Treatment Plant Intermediate Clarifier Wet Weather System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB013100	Williamsburg Treatment Plant Outfall Flow Control System Repairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
WB013200	High Priority Projects Round 2 Project 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,739
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,739
York River							
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	\$ 2,486	\$ 1,036	\$ -	\$ -	\$ -	\$ -
YR010900	Tabb Pressure Reducing Station and Offline Storage Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR011900	Bethel-Poquoson Force Main Part III Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR013710	York River Treatment Plant Advanced Nutrient Reduction Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR013900	York River System Isolation Valve Installation and Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR014000	York River Treatment Plant Administration Building Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR014100	Coliseum Pressure Reducing Station Enhanced Storage	\$ 2,200	\$ 1	\$ -	\$ -	\$ -	\$ -
YR014200	LaSalle Avenue Boat Harbor to York River Interconnect Force Main	\$ 2,889	\$ -	\$ -	\$ -	\$ -	\$ -
YR014300	Bethel-Poquoson Force Main Phase II (Wythe Creek Road) Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR014500	York River Treatment Plant Headworks Motor Control Center Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
YR014600	Bethel-Poquoson Force Main Part IV Replacement-Wythe Creek Exposed Crossing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 7,575	\$ 1,037	\$ -	\$ -	\$ -	\$ -
Note:	PORTS - City of Portsmouth VIP - Virginia Initiative Plant HPP - High Priority Project						

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2022 to FY-2031	FY-2022	FY-2023	FY-2024	FY-2025
General						
GN010730	Horizontal Valve Replacement Phase III	\$ 1,039	\$ 113	\$ 337	\$ 337	\$ 253
GN013300	Treatment Plant Grease Handling Facilities	\$ 7,059	\$ 5,640	\$ 1,419	\$ -	\$ -
GN014900	North Shore Gravity Sewer Improvements Phase I	\$ 4,208	\$ 1,890	\$ 2,311	\$ 7	\$ -
GN015000	South Shore Gravity Sewer Improvements Phase I	\$ 743	\$ 70	\$ 252	\$ 422	\$ -
GN015300	Interceptor System Valve Improvements Phase I	\$ 2,566	\$ 141	\$ 902	\$ 1,306	\$ 218
GN015400	South Shore Aerial Crossing Improvements	\$ 260	\$ 11	\$ 127	\$ 121	\$ -
GN015800	North Shore Automated Diversion Facilities	\$ 1,993	\$ 748	\$ 1,246	\$ -	\$ -
GN016210	SWIFT Nansemond Full Scale MAR Well Installation	\$ 1,513	\$ 1,513	\$ -	\$ -	\$ -
GN016220	SWIFT Research Center Full Scale MAR Well Integration	\$ 782	\$ 782	\$ -	\$ -	\$ -
GN016310	Integrated Planning of SWIFT	\$ 4,444	\$ 904	\$ 902	\$ 913	\$ 904
GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ 596	\$ 177	\$ 175	\$ 176	\$ 68
GN016320	Program Management of SWIFT Full Scale Implementation	\$ 67,805	\$ 5,705	\$ 5,448	\$ 5,688	\$ 5,688
GN016342	Williamsburg SWIFT Land Acquisition	\$ 1,497	\$ -	\$ -	\$ -	\$ -
GN016343	James River SWIFT Land Acquisition	\$ 9,561	\$ 9,561	\$ -	\$ -	\$ -
GN016344	James River Land Improvements	\$ 4,675	\$ 288	\$ 758	\$ 1,308	\$ 1,314
GN016345	Boat Harbor Pump Station Land Acquisition	\$ 3,000	\$ 3,000	\$ -	\$ -	\$ -
GN016346	Boat Harbor Transmission Force Main Land Acquisition	\$ 2,500	\$ 2,500	\$ -	\$ -	\$ -
GN016350	Williamsburg SWIFT Facility	\$ 130,508	\$ -	\$ -	\$ -	\$ -
GN016351	Williamsburg Recharge Wells	\$ 24,444	\$ -	\$ -	\$ -	\$ -
GN016360	James River SWIFT Facility	\$ 251,225	\$ 20,940	\$ 55,964	\$ 88,623	\$ 69,586
GN016361	James River Recharge Wells	\$ 27,914	\$ 2,106	\$ 7,503	\$ 9,445	\$ 7,260
GN016370	York River SWIFT Facility	\$ 175,556	\$ -	\$ -	\$ -	\$ -
GN016371	York River Recharge Wells	\$ 27,500	\$ -	\$ -	\$ -	\$ -
GN016380	Nansemond SWIFT Facility	\$ 307,013	\$ 1,398	\$ 3,788	\$ 3,499	\$ 14,983
GN016381	Nansemond Recharge Wells	\$ 48,888	\$ -	\$ -	\$ 1,412	\$ 801
GN016390	VIP SWIFT Facility	\$ 334,132	\$ -	\$ -	\$ 5,507	\$ 342
GN016391	VIP Recharge Wells	\$ 73,332	\$ 170	\$ 1,942	\$ 684	\$ 609
GN016392	VIP SWIFT Site Work	\$ 38,894	\$ 692	\$ 327	\$ 731	\$ 21,718
GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ 5,479	\$ 1,409	\$ 2,714	\$ 1,357	\$ -
GN017100	Climate Change Planning	\$ 892	\$ 892	\$ -	\$ -	\$ -
GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II	\$ 5,581	\$ 3,312	\$ 2,235	\$ 34	\$ -
GN017300	Treatment Plant Dewatering Replacement Program	\$ 35,000	\$ -	\$ -	\$ 3,889	\$ 3,889
GN017400	Treatment Plant Dewatering Replacement Phase III	\$ 3,563	\$ 748	\$ 2,346	\$ 469	\$ -
GN017500	Fleet Management Program	\$ 11,647	\$ -	\$ 1,500	\$ 1,500	\$ 1,100
GN017900	Solids System Improvements for Army Base MHI Offline	\$ 3,549	\$ 989	\$ 1,920	\$ 640	\$ -
GN018000	Inflow Reduction Program - Phase I	\$ 1,544	\$ 1,544	\$ -	\$ -	\$ -
GN018100	Fleet Management (FY22)	\$ 3,600	\$ 3,600	\$ -	\$ -	\$ -
GN018200	Water Quality Department Instrumentation Equipment (FY22)	\$ 463	\$ 463	\$ -	\$ -	\$ -
GN018300	High Risk Clamp Replacement Program-Phase 1	\$ 395	\$ 395	\$ -	\$ -	\$ -
	Subtotal	\$ 1,248,254	\$ 71,701	\$ 94,116	\$ 128,068	\$ 128,733
Future Improvements						
IP010400	Interceptor System Rehabilitation and Replacement	\$ 217,014	\$ -	\$ -	\$ -	\$ 2,239
	Subtotal	\$ 217,014	\$ -	\$ -	\$ -	\$ 2,239
CIP TOTALS		\$ 2,877,675	\$ 290,000	\$ 401,961	\$ 509,524	\$ 400,000
Note:	SWIFT - Sustainable Water Initiative for Tomorrow MAR - Managed Aquifer Recharge VIP - Virginia Initiative Plant SCADA - Supervisory Control and Data Acquisition MHI - Multiple Hearth Incinerator					

FY-2022 to FY-2031 Cash Flow Projections (in thousands)

CIP No	Project Name	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030	FY-2031
General							
GN010730	Horizontal Valve Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN013300	Treatment Plant Grease Handling Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN014900	North Shore Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015000	South Shore Gravity Sewer Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015300	Interceptor System Valve Improvements Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015400	South Shore Aerial Crossing Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN015800	North Shore Automated Diversion Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016210	SWIFT Nansemond Full Scale MAR Well Installation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016220	SWIFT Research Center Full Scale MAR Well Integration	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016310	Integrated Planning of SWIFT	\$ 627	\$ 194	\$ -	\$ -	\$ -	\$ -
GN016311	Outfall Dispersion Modeling for Full Scale SWIFT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016320	Program Management of SWIFT Full Scale Implementation	\$ 5,688	\$ 5,688	\$ 5,688	\$ 5,688	\$ 5,688	\$ 5,688
GN016342	Williamsburg SWIFT Land Acquisition	\$ 632	\$ 865	\$ -	\$ -	\$ -	\$ -
GN016343	James River SWIFT Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016344	James River Land Improvements	\$ 1,007	\$ -	\$ -	\$ -	\$ -	\$ -
GN016345	Boat Harbor Pump Station Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016346	Boat Harbor Transmission Force Main Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016350	Williamsburg SWIFT Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016351	Williamsburg Recharge Wells	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,065
GN016360	James River SWIFT Facility	\$ 16,112	\$ -	\$ -	\$ -	\$ -	\$ -
GN016361	James River Recharge Wells	\$ 1,600	\$ -	\$ -	\$ -	\$ -	\$ -
GN016370	York River SWIFT Facility	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,412
GN016371	York River Recharge Wells	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN016380	Nansemond SWIFT Facility	\$ 60,565	\$ 91,555	\$ 86,265	\$ 40,669	\$ 4,291	\$ -
GN016381	Nansemond Recharge Wells	\$ 1,761	\$ 12,129	\$ 17,142	\$ 13,063	\$ 2,580	\$ -
GN016390	VIP SWIFT Facility	\$ 9,361	\$ 33,193	\$ 83,586	\$ 97,342	\$ 78,613	\$ 25,514
GN016391	VIP Recharge Wells	\$ 10,167	\$ 10,772	\$ 10,801	\$ 10,772	\$ 10,772	\$ 10,772
GN016392	VIP SWIFT Site Work	\$ 15,426	\$ -	\$ -	\$ -	\$ -	\$ -
GN016700	Treatment Plant Solids Handling Replacement Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017100	Climate Change Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017200	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017300	Treatment Plant Dewatering Replacement Program	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889	\$ 3,889
GN017400	Treatment Plant Dewatering Replacement Phase III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN017500	Fleet Management Program	\$ 1,887	\$ 1,887	\$ 1,887	\$ 1,886	\$ -	\$ -
GN017900	Solids System Improvements for Army Base MHI Offline	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN018000	Inflow Reduction Program - Phase I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN018100	Fleet Management (FY22)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN018200	Water Quality Department Instrumentation Equipment (FY22)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GN018300	High Risk Clamp Replacement Program-Phase 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal	\$ 128,723	\$ 160,173	\$ 209,258	\$ 173,308	\$ 105,834	\$ 48,340
Future Improvements							
IP010400	Interceptor System Rehabilitation and Replacement	\$ 2,604	\$ 774	\$ 2,693	\$ 3,868	\$ 71,479	\$ 133,358
	Subtotal	\$ 2,604	\$ 774	\$ 2,693	\$ 3,868	\$ 71,479	\$ 133,358
CIP TOTALS		\$ 223,810	\$ 223,810	\$ 247,619	\$ 200,000	\$ 190,476	\$ 190,476
Note:	SWIFT - Sustainable Water Initiative for Tomorrow MAR - Managed Aquifer Recharge VIP - Virginia Initiative Plant SCADA - Supervisory Control and Data Acquisition MHI - Multiple Hearth Incinerator						

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