Annual Budget

FOR THE FISCAL YEAR ENDED JUNE 30, 2016

75th ANNIVERSARY HRSD *living the legacy*

HRSD Annual Budget
For Fiscal Year Ended June 30, 2016
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Introduction

General Manager's Introduction

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

Over the past 75 years, HRSD has developed into one of the premier wastewater treatment organizations in the nation. With 13 treatment plants 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 75-year investment in wastewater infrastructure.

The Governor appointed, eight-member HRSD Commission approved this Fiscal Year-2016 budget at its regular meeting on May 26, 2015. 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 less than $30 per month for this essential service. That is less than one dollar each day to protect our treasured waterways.

The requirement to reduce the amount of nutrients that HRSD's 13 treatment plants discharge into the Chesapeake Bay has mandated the largest capital improvement program in our history. Major plant upgrades have been completed at the Nansemond Treatment Plant in Suffolk, the James River Treatment Plant in Newport News and the York River Treatment Plant in Seaford. Additional projects underway in Norfolk at the Army Base Treatment Plant and the Virginia Initiative Plant will ensure HRSD meets the 2017 milestone requirements of the Chesapeake Bay Total Maximum Daily Load. HRSD continues to lead international research efforts to reduce the cost of removing nutrients from wastewater. HRSD's research work is leveraged with 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.

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. 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 nutrient issue and the wet weather capacity requirement are both driven by regulations with which HRSD must comply. These regulatory mandates consume over two-thirds of the $1.4 billion 10-year Capital Improvement Plan. HRSD finances its capital projects by issuing bonds

and using cash on hand. Our payments on outstanding debt will increase during the next fiscal year to just under $61 million. Despite our best efforts to control costs through efficiency, conservation and innovation, our operations expenses are projected to increase in FY-2016 from $137 million to $141 million. These increases continue to be heavily dictated by regulatory compliance. As a result of the increased operating costs and debt payments, our average residential customers will see their monthly bills increase by approximately $1.92.

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 that 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. By not flushing unused medications down the sink or the toilet, our ratepayers can make a difference. Each flush counts.

As we reflect on 75 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 ensured we can 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,

Ted Henifin, P.E.
General Manager

Principal Officials

June 30, 2015

COMMISSIONERS

Vishnu K. Lakdawala, PhD, Chair

Frederick N. Elofson, CPA, Vice-Chair

Michael E. Glenn

Arthur C. Bredemeyer

Maurice P. Lynch, PhD

Stephen C. Rodriguez

Susan M. Rotkis

Willie Levenston, Jr.

COMMISSION SECRETARY

Jennifer L. Cascio

SENIOR STAFF

Edward G. Henifin, PE
General Manager

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 Finance and Treasurer

Paula A. Hogg
Director of Talent Management

Phillip L. Hubbard, PE
Special Assistant for Compliance Assurance

Bruce W. Husselbee, PE
Director of Engineering

James J. Pletl, PhD
Director of Water Quality

COUNSEL

Kellam, Pickrell, Cox & Tayloe
General Counsel

Jones, Blechman, Woltz & Kelly, PC
Associate Counsel

AquaLaw, PLC
Special Counsel

Sidley Austin, LLP
Bond Counsel

Key Facts

Service Area and Operations

Date Established	November 5, 1940
Communities Served	17 communities encompassing 3,100 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-fourth of Virginia's population, reside in HRSD's service area.

Operation and Facilities

No. of Positions (FY-2016)	803
Miles of Interceptor Systems	531 Miles
Wastewater Treated	154 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	Aa2	n/a	n/a

Operating Budget (FY-2016) $241,640,000

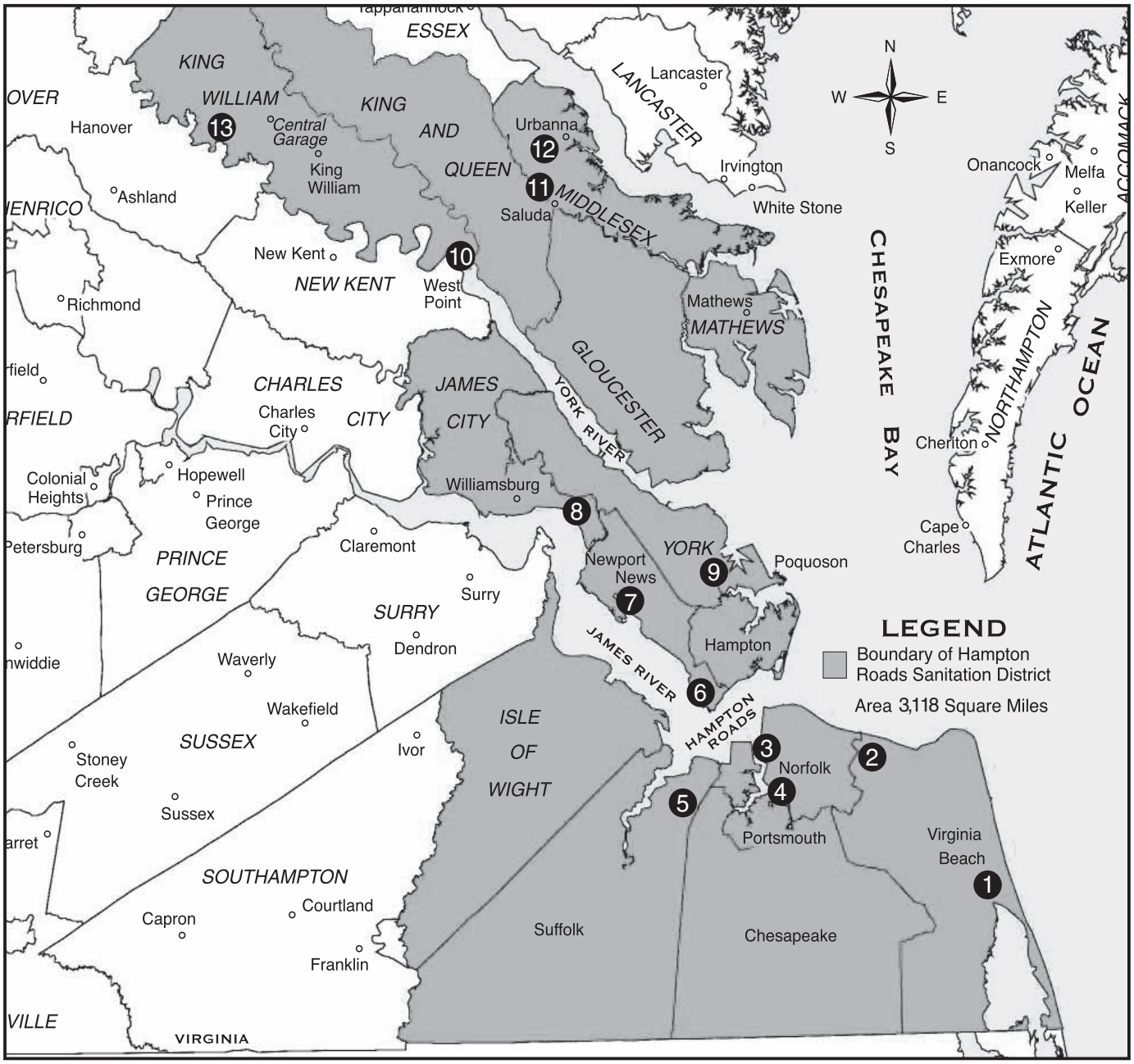
HRSD

A Political Subdivision of the Commonwealth of Virginia

Major facilities include the following treatment plants:

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

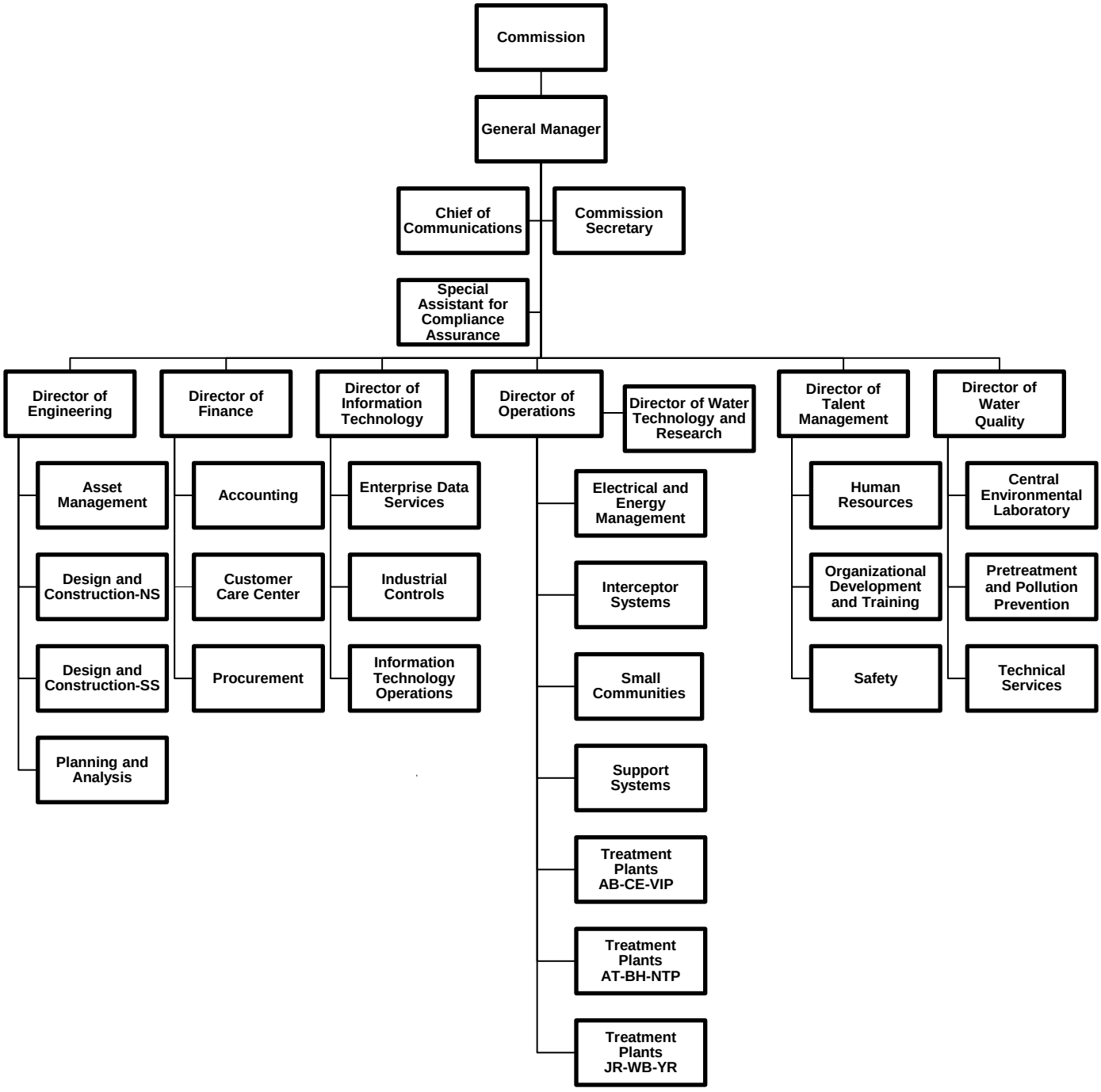
Serving the Cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg, and the Counties of Gloucester, Isle of Wight, James City King and Queen, King William, Mathews, Middlesex and York



2011

HRSD Organization Chart

July 1, 2015



History of HRSD

June 30, 2014

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 six 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 2014.

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 to every HRSD treatment plant for outstanding compliance with National Pollutant Discharge Elimination System (NPDES) permits during calendar year 2013. The Army Base Treatment Plant was honored for 27 consecutive years of perfect permit compliance, an achievement unsurpassed in the nation. The other major treatment plants received the following awards in recognition of their outstanding permit compliance status: Atlantic Plant—Gold, Boat Harbor—Platinum (12 consecutive years), Chesapeake-Elizabeth—Gold, James River—Silver, Nansemond—Platinum (12 consecutive years), Virginia Initiative Plant—Platinum (18 consecutive years), Williamsburg—Platinum (19 consecutive years) and York River—Platinum (6 consecutive years). Central Middlesex, King William, Urbanna and West Point, treatment plants in the Small Communities Division, all earned Gold Awards.

HRSD's other Fiscal Year 2014 honors included the Outstanding Agency Accreditation Achievement Award from the National Institute for Public Procurement (NIGP), a certificate from the Virginia Tech Wastewater Treatment Plant Operator Short School recognizing HRSD's commitment to improving plant operations within the Commonwealth of Virginia for 37 consecutive years and the Hampton Roads Alliance for Environmental Education (HRAEE) 2013 Increasing Communications Award. In addition, Team HRSD placed first overall in the Division 2 Operations Challenge competition held during the 2013 Water Environment Federation Technical Exhibition and Conference (WEFTEC). The Elizabeth River Project also recognized HRSD as a Sustained Distinguished Performance Model Level River Star business.

Rate Schedules

WASTEWATER TREATMENT CHARGE SCHEDULE

Service	FY-2016	FY-2015
Flow (monthly basis)		
Per CCF *	$ 4.13	$ 3.83
Minimum charge (per day)	0.25	0.25
Surcharge, per 100 pounds		
BOD	$ 7.76	$ 9.80
TSS	7.18	6.68
TP	69.85	69.59
TKN	14.70	12.12
Septic, per gallon	$ 0.1362	$ 0.1267
Private water supply (per 30-day period)		
Residential, non-metered		
Flat rate	$ 26.32	$ 26.32

* CCF = 100 Cubic Feet (approximately 748 gallons)

VOLUME BASED FACILITY CHARGE SCHEDULE

Meter Size	FY-2016	FY-2015
5/8 Inch	$ 1,895	$ 1,895
3/4 Inch	4,830	4,830
1 Inch	8,170	8,170
1 ½ Inch	17,260	17,260
2 Inch	29,420	29,420
3 Inch	67,350	63,600
4 Inch	122,400	115,580
6 Inch	284,070	268,250
8 Inch	516,260	487,510
10 Inch	820,560	774,860
12 Inch	1,198,210	1,131,490
14 Inch	1,650,250	1,558,360
16 Inch	2,177,580	2,056,330

MIDDLE PENINSULA CHARGE SCHEDULE

(per 1,000 gallons)

Community	FY-2016	FY-2015
West Point	$ 13.02	$ 13.02
Mathews	10.86	10.86
Urbanna	13.00	13.00
King William	11.49	11.49

FEES AND SERVICE CHARGES

	FY-2016	FY-2015
Damaged lock	$ 100	$ 100
Service restoration	100	100
Meter reading (customer-owned meter)	75	75
Inaccessible meter	50	50
Returned payments	25	25
Delinquent	15	15
Deduction meter service	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 Section

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

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

Operating Budget Section

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 Budget. 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.

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Capital Budget

The Capital Budget represents a plan of specific, major capital improvements over a period of 10 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 http://www.hrsd.com/capitalimprovementprogram.shtml.

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

HRSD's Rate Schedule is available at http://www.hrsd.com/rateschedule.shtml.

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

Glossary of Financial Terms

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

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

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

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

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

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

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.

General Reserve as Percent of Operating Revenues: Unrestricted cash and investments at fiscal year-end that are not earmarked for another purpose divided by budgeted appropriations for Operations and Improvements adjusted by certain adjustments required by GAAP. HRSD's Financial Policy requires that the General Reserve at the end of any fiscal year not be less than 270 – 365 (75-100 percent) days of the current years' projected operating and maintenance expenses less depreciation. This reserve is intended to help HRSD cover unanticipated expenses that cannot be paid from the current fiscal year's budgetary resources.

Liquidity Ratio: Unrestricted cash and investments divided by Maximum Annual Debt Service. This ratio measures the liquidity available to meet debt service requirements.

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.

Maximum Annual Debt Service: Represents the greatest long-term debt service requirement for the then current or succeeding fiscal year.

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 Trust Agreement requires Senior Debt Service Coverage will not be less than 1.2 times senior lien debt service.

Total Debt Service Coverage: Current-year revenues available for total debt service divided by current-year total debt service. Total debt service represents the combination of senior lien and subordinate lien debt service. This ratio indicates the financial margin to meet current both senior lien debt service and subordinate lien debt service with current revenues available. HRSD's Financial Policy requires that total debt service coverage will not be less than 1.4 times total 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 Trust Agreement requires that Total Debt Service Coverage will not be less than 1.0 times total debt service.

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

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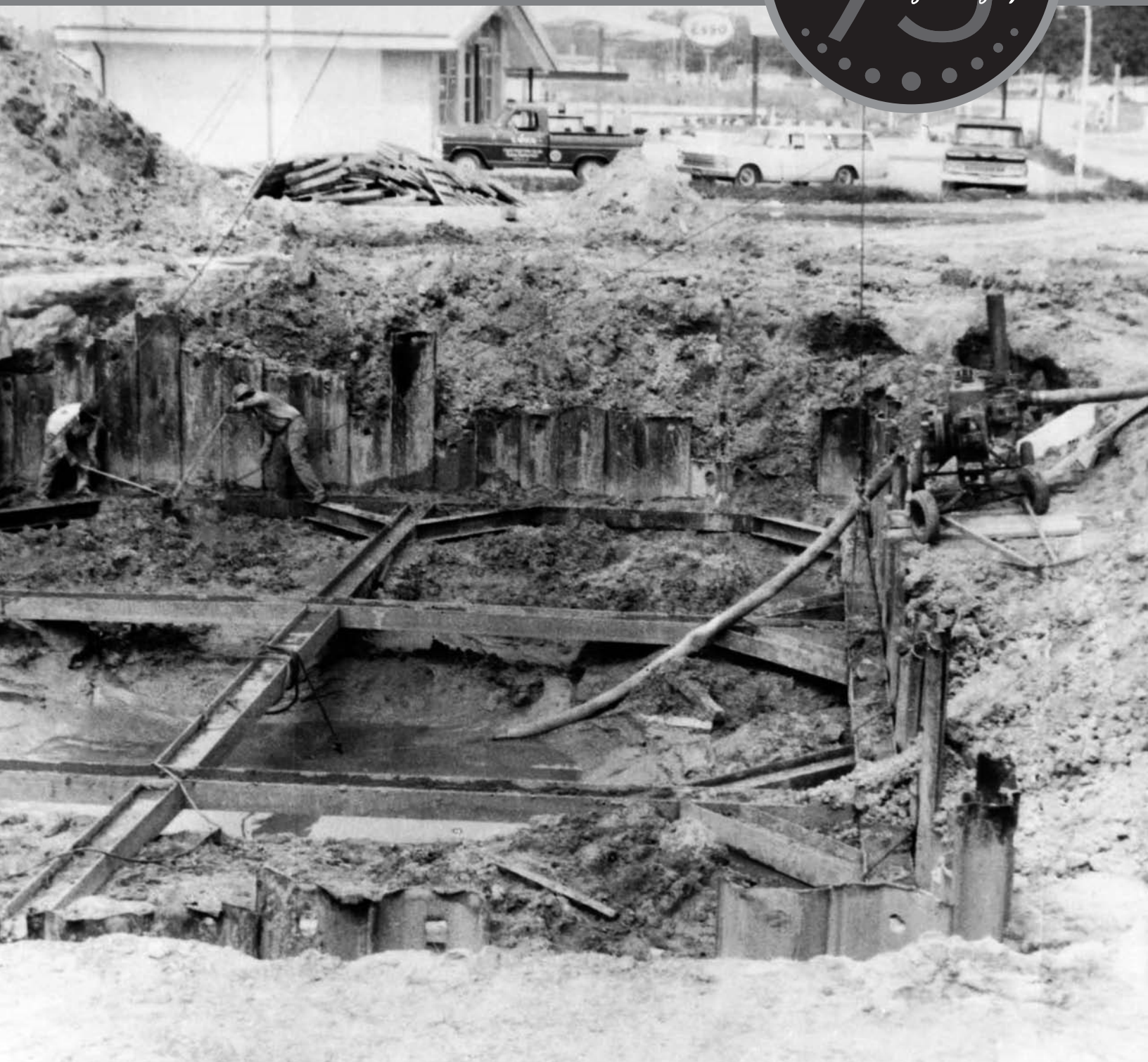
Financial Forecast



Financial Forecast (in thousands)	2016	2017	2018	2019
Operating Budget Forecast				
Rate and Fees Increase - %	*8%*	*6%*	*6%*	*9%*
Revenues				
Operating Revenues	$ 230,750	$ 241,058	$ 252,835	$ 272,401
Non-operating Revenues	10,890	12,401	13,370	13,466
Total Revenues	**$ 241,640**	**$ 253,459**	**$ 266,205**	**$ 285,867**
Operations	$ 129,873	$ 135,836	$ 142,500	$ 149,409
Major Repairs and Capital Acquisitions	11,001	11,441	11,898	12,375
Total Operating Appropriations	140,874	147,277	154,398	161,784
Debt Service	60,523	56,661	57,633	64,734
Transfer to Capital Improvement Plan (PAYGO)	39,983	49,521	54,000	54,837
Transfer to General Reserve	-	-	-	4,308
Transfer to Risk Management Reserve	260	-	174	204
Total Appropriations	**$ 241,640**	**$ 253,459**	**$ 266,205**	**$ 285,867**
Capital Improvement Budget Forecast				
Beginning Capital Reserves	$ 32,632	$ -	$ -	$ -
Sources of Funds				
Debt funded	68,085	59,679	53,500	70,163
HRSD - Cash	39,983	49,521	54,000	54,837
Grants and Other Reimbursements	14,300	10,800	12,500	-
Transfer from Debt Service Reserve Fund	-	-	-	-
Total Capital Resources	155,000	120,000	120,000	125,000
Uses of Funds - Capital Expenditures	155,000	120,000	120,000	125,000
Ending Capital Resources	**$ -**	**$ -**	**$ -**	**$ -**
Reserves Balance Forecast				
General Reserve	$ 127,999	$ 127,999	$ 127,999	$ 132,307
Risk Reserve	2,741	2,741	2,915	3,119
Debt Service Reserve Fund	44,118	44,118	44,118	44,118
Total Reserves Balance	**$ 174,858**	**$ 174,858**	**$ 175,032**	**$ 179,544**
Financial Ratios Forecast				
Senior Debt Service Coverage	1.81	2.28	2.37	2.79
All Debt Service Coverage	1.74	1.96	2.05	2.00
CIP % Cash Funded (current year contributions)	26%	41%	45%	44%
Debt Service as a % of Total Revenues	25%	22%	22%	23%
General Reserve as a % of Operating Expenses	81%	81%	80%	75%

Financial Forecast (in thousands)	2020	2021	2022	2023
Operating Budget Forecast				
Rate and Fees Increase - %	*9%*	*9%*	*9%*	*9%*
Revenues				
Operating Revenues	$ 293,500	$ 316,252	$ 340,787	$ 367,247
Non-operating Revenues	14,086	14,577	14,978	15,396
Total Revenues	**$ 307,586**	**$ 330,829**	**$ 355,765**	**$ 382,643**
Operations	$ 156,635	$ 164,629	$ 169,749	$ 178,335
Major Repairs and Capital Acquisitions	12,870	13,384	13,920	14,477
Total Operating Appropriations	169,505	178,013	183,669	192,812
Debt Service	65,590	73,445	74,550	83,082
Transfer to Capital Improvement Plan (PAYGO)	52,528	63,958	81,236	78,502
Transfer to General Reserve	19,760	15,197	16,225	28,012
Transfer to Risk Management Reserve	203	216	85	235
Total Appropriations	**$ 307,586**	**$ 330,829**	**$ 355,765**	**$ 382,643**
Capital Improvement Budget Forecast				
Beginning Capital Reserves	$ -	$ -	$ -	$ -
Sources of Funds				
Debt funded	89,072	68,042	47,764	78,498
HRSD - Cash	52,528	63,958	81,236	78,502
Grants and Other Reimbursements	1,900	1,000	-	-
Transfer from Debt Service Reserve Fund	-	-	-	-
Total Capital Resources	143,500	133,000	129,000	157,000
Uses of Funds - Capital Expenditures	143,500	133,000	129,000	157,000
Ending Capital Resources	**$ -**	**$ -**	**$ -**	**$ -**
Reserves Balance Forecast				
General Reserve	$ 152,068	$ 167,265	$ 183,490	$ 211,502
Risk Reserve	3,322	3,538	3,622	3,858
Debt Service Reserve Fund	44,118	44,118	44,118	44,118
Total Reserves Balance	**$ 199,508**	**$ 214,921**	**$ 231,230**	**$ 259,478**
Financial Ratios Forecast				
Senior Debt Service Coverage	2.87	2.98	2.90	3.00
All Debt Service Coverage	2.20	2.16	2.41	2.36
CIP % Cash Funded (current year contributions)	37%	48%	63%	50%
Debt Service as a % of Total Revenues	21%	22%	21%	22%
General Reserve as a % of Operating Expenses	75%	75%	75%	75%

Financial Forecast (in thousands)	2024	2025	2026	2027
Operating Budget Forecast				
Rate and Fees Increase - %	*7%*	*7%*	*7%*	*7%*
Revenues				
Operating Revenues	$ 388,747	$ 411,514	$ 435,621	$ 461,147
Non-operating Revenues	16,053	15,788	16,069	16,387
Total Revenues	**$ 404,800**	**$ 427,302**	**$ 451,690**	**$ 477,534**
Operations	$ 187,414	$ 197,018	$ 209,209	$ 220,097
Major Repairs and Capital Acquisitions	15,056	15,658	16,284	16,935
Total Operating Appropriations	202,470	212,676	225,493	237,032
Debt Service	83,115	84,398	95,470	97,082
Transfer to Capital Improvement Plan (PAYGO)	109,762	120,278	118,943	132,522
Transfer to General Reserve	9,202	9,683	11,499	10,595
Transfer to Risk Management Reserve	251	267	285	303
Total Appropriations	**$ 404,800**	**$ 427,302**	**$ 451,690**	**$ 477,534**
Capital Improvement Budget Forecast				
Beginning Capital Reserves	$ -	$ -	$ -	$ -
Sources of Funds				
Debt funded	45,738	62,222	122,436	120,463
HRSD - Cash	109,762	120,278	118,943	132,522
Grants and Other Reimbursements	-	-	-	-
Transfer from Debt Service Reserve Fund	27,000	-	-	-
Total Capital Resources	182,500	182,500	241,379	252,985
Uses of Funds - Capital Expenditures	182,500	182,500	241,379	252,985
Ending Capital Resources	**$ 0**	**$ -**	**$ -**	**$ -**
Reserves Balance Forecast				
General Reserve	$ 220,704	$ 230,387	$ 241,885	$ 252,480
Risk Reserve	4,108	4,375	4,660	4,963
Debt Service Reserve Fund	17,118	17,118	17,118	17,118
Total Reserves Balance	**$ 241,930**	**$ 251,880**	**$ 263,663**	**$ 274,561**
Financial Ratios Forecast				
Senior Debt Service Coverage	3.30	3.57	3.95	5.12
All Debt Service Coverage	2.51	2.64	2.44	2.57
CIP % Cash Funded (current year contributions)	60%	66%	49%	52%
Debt Service as a % of Total Revenues	21%	20%	21%	20%
General Reserve as a % of Operating Expenses	75%	75%	75%	75%

Financial Forecast (in thousands)	2028	2029	2030	2031
Operating Budget Forecast				
Rate and Fees Increase - %	*7%*	*6%*	*6%*	*6%*
Revenues				
Operating Revenues	$ 488,177	$ 512,107	$ 537,214	$ 563,555
Non-operating Revenues	16,686	16,878	17,201	17,537
Total Revenues	**$ 504,863**	**$ 528,985**	**$ 554,415**	**$ 581,092**
Operations	$ 231,626	$ 243,838	$ 256,776	$ 270,491
Major Repairs and Capital Acquisitions	17,613	18,317	19,050	19,812
Total Operating Appropriations	249,239	262,155	275,826	290,303
Debt Service	106,177	108,888	123,999	126,597
Transfer to Capital Improvement Plan (PAYGO)	137,973	145,856	141,855	150,768
Transfer to General Reserve	11,152	11,742	12,369	13,034
Transfer to Risk Management Reserve	322	344	366	390
Total Appropriations	**$ 504,863**	**$ 528,985**	**$ 554,415**	**$ 581,092**
Capital Improvement Budget Forecast				
Beginning Capital Reserves	$ -	$ -	$ -	$ -
Sources of Funds				
Debt funded	120,518	130,973	151,726	150,676
HRSD - Cash	137,973	145,856	141,855	150,768
Grants and Other Reimbursements	-	-	-	-
Transfer from Debt Service Reserve Fund	6,000	-	-	-
Total Capital Resources	264,491	276,829	293,581	301,444
Uses of Funds - Capital Expenditures	264,491	276,829	293,581	301,444
Ending Capital Resources	**$ -**	**$ -**	**$ -**	**$ -**
Reserves Balance Forecast				
General Reserve	$ 263,632	$ 275,374	$ 287,743	$ 300,778
Risk Reserve	5,285	5,629	5,995	6,384
Debt Service Reserve Fund	11,118	11,118	11,118	11,118
Total Reserves Balance	**$ 280,035**	**$ 292,121**	**$ 304,856**	**$ 318,280**
Financial Ratios Forecast				
Senior Debt Service Coverage	5.64	5.92	6.33	10.94
All Debt Service Coverage	2.47	2.54	2.31	2.38
CIP % Cash Funded (current year contributions)	52%	53%	48%	50%
Debt Service as a % of Total Revenues	21%	21%	22%	22%
General Reserve as a % of Operating Expenses	75%	75%	75%	75%

Financial Forecast (in thousands)	2032	2033	2034	2035
Operating Budget Forecast				
Rate and Fees Increase - %	*6%*	*6%*	*6%*	*6%*
Revenues				
Operating Revenues	$ 591,191	$ 620,185	$ 650,605	$ 682,520
Non-operating Revenues	17,886	18,249	18,508	18,903
Total Revenues	**$ 609,077**	**$ 638,434**	**$ 669,113**	**$ 701,423**
Operations	$ 285,031	$ 300,452	$ 316,813	$ 334,177
Major Repairs and Capital Acquisitions	20,605	21,429	22,286	23,177
Total Operating Appropriations	305,636	321,881	339,099	357,354
Debt Service	138,420	151,883	151,909	172,780
Transfer to Capital Improvement Plan (PAYGO)	150,866	149,738	162,348	154,655
Transfer to General Reserve	13,740	14,490	15,286	16,133
Transfer to Risk Management Reserve	415	442	471	501
Total Appropriations	**$ 609,077**	**$ 638,434**	**$ 669,113**	**$ 701,423**
Capital Improvement Budget Forecast				
Beginning Capital Reserves	$ -	$ -	$ -	$ -
Sources of Funds				
Debt funded	166,733	188,766	195,550	216,844
HRSD - Cash	150,866	149,738	162,348	154,655
Grants and Other Reimbursements	-	-	-	-
Transfer from Debt Service Reserve Fund	-	6,000	-	1,350
Total Capital Resources	317,599	344,504	357,898	372,849
Uses of Funds - Capital Expenditures	317,599	344,504	357,898	372,849
Ending Capital Resources	**$ -**	**$ -**	**$ -**	**$ -**
Reserves Balance Forecast				
General Reserve	$ 314,518	$ 329,008	$ 344,294	$ 360,427
Risk Reserve	6,799	7,241	7,712	8,213
Debt Service Reserve Fund	11,118	5,118	5,118	3,768
Total Reserves Balance	**$ 332,435**	**$ 341,367**	**$ 357,124**	**$ 372,408**
Financial Ratios Forecast				
Senior Debt Service Coverage	14.11	17.77	22.74	24.27
All Debt Service Coverage	2.27	2.14	2.25	2.06
CIP % Cash Funded (current year contributions)	48%	43%	45%	41%
Debt Service as a % of Total Revenues	23%	24%	23%	25%
General Reserve as a % of Operating Expenses	75%	75%	75%	75%

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Operating Budget

75th ANNIVERSARY
HRSD
Living the Legacy

Operating Budget

	FY-2016	Adopted FY-2015	Increase/ (Decrease)	Percent Change
Operating Revenues				
Wastewater Treatment Charges	$ 228,700,000	$ 214,050,000	$ 14,650,000	7%
Miscellaneous	2,050,000	2,150,000	(100,000)	(5%)
Total Operating Revenues	230,750,000	216,200,000	14,550,000	7%
Non-Operating Revenues				
Wastewater Facility Charges	6,000,000	5,500,000	500,000	9%
Investment Earnings	1,400,000	1,200,000	200,000	17%
Build America Bond Subsidy	2,400,000	2,400,000	-	0%
Other	1,090,000	1,310,000	(220,000)	(17%)
Total Non-Operating Revenues	10,890,000	10,410,000	480,000	5%
Total Revenues	$ 241,640,000	$ 226,610,000	$ 15,030,000	7%
Operating Appropriations				
General Management	$ 891,401	$ 3,320,722	$ (2,429,321)	(73%)
Talent Management	2,151,542	2,041,867	109,675	5%
Finance	12,704,429	12,209,220	495,209	4%
Information Technology	13,125,870	10,841,267	2,284,603	21%
Operations	87,476,569	86,347,337	1,129,232	1%
Engineering	5,169,527	4,586,085	583,442	13%
Water Quality	13,681,951	12,415,427	1,266,524	10%
General Expenses	5,673,205	5,545,555	127,650	2%
Total Operating Appropriations	140,874,494	137,307,480	3,567,014	3%
Appropriations for Debt Service and Transfers				
Debt Service	60,522,000	60,387,014	134,986	0%
Transfer to CIP	39,983,506	28,915,506	11,068,000	38%
Transfer to Risk Management Reserve	260,000	-	260,000	0%
Total Appropriations for Debt Service and Transfers	100,765,506	89,302,520	11,462,986	13%
Total Appropriations	$ 241,640,000	$ 226,610,000	$ 15,030,000	7%

Operating Budget Summary

	General Management	Talent Management	Finance	Information Technology	Operations	Engineering	Water Quality	General Expenses
Personal Services	$ 583,803	$ 1,244,291	$ 5,939,017	$ 3,977,146	$ 31,641,821	$ 3,392,629	$ 6,861,328	$ (600,000)
Fringe Benefits	178,243	505,250	2,622,188	1,496,084	14,814,423	1,275,940	2,929,743	563,555
Materials & Supplies	10,000	64,500	128,158	819,600	3,468,300	22,120	1,075,775	60,000
Transportation	32,400	18,300	108,200	53,551	886,000	68,288	163,430	-
Utilities	-	-	263,291	1,326,800	10,179,500	-	-	535,000
Chemical Purchases	-	-	-	-	8,454,600	-	-	-
Contractual Services	85,000	79,400	3,354,732	4,493,229	8,521,700	259,512	756,820	4,977,750
Major Repairs	-	-	-	750,000	6,518,600	50,000	802,320	-
Capital Assets	-	13,200	32,500	-	2,182,300	-	652,000	-
Miscellaneous Expense	1,955	226,601	256,343	209,460	809,325	101,038	440,535	136,900
Operating Approporiations	**$ 891,401**	**$ 2,151,542**	**$ 12,704,429**	**$ 13,125,870**	**$ 87,476,569**	**$ 5,169,527**	**$ 13,681,951**	**$ 5,673,205**

Full-time Positions:

Current	4	10	91	40	513	35	96
Changes	0	4	8	6	(14)	4	6
Budgeted	4	14	99	46	499	39	102

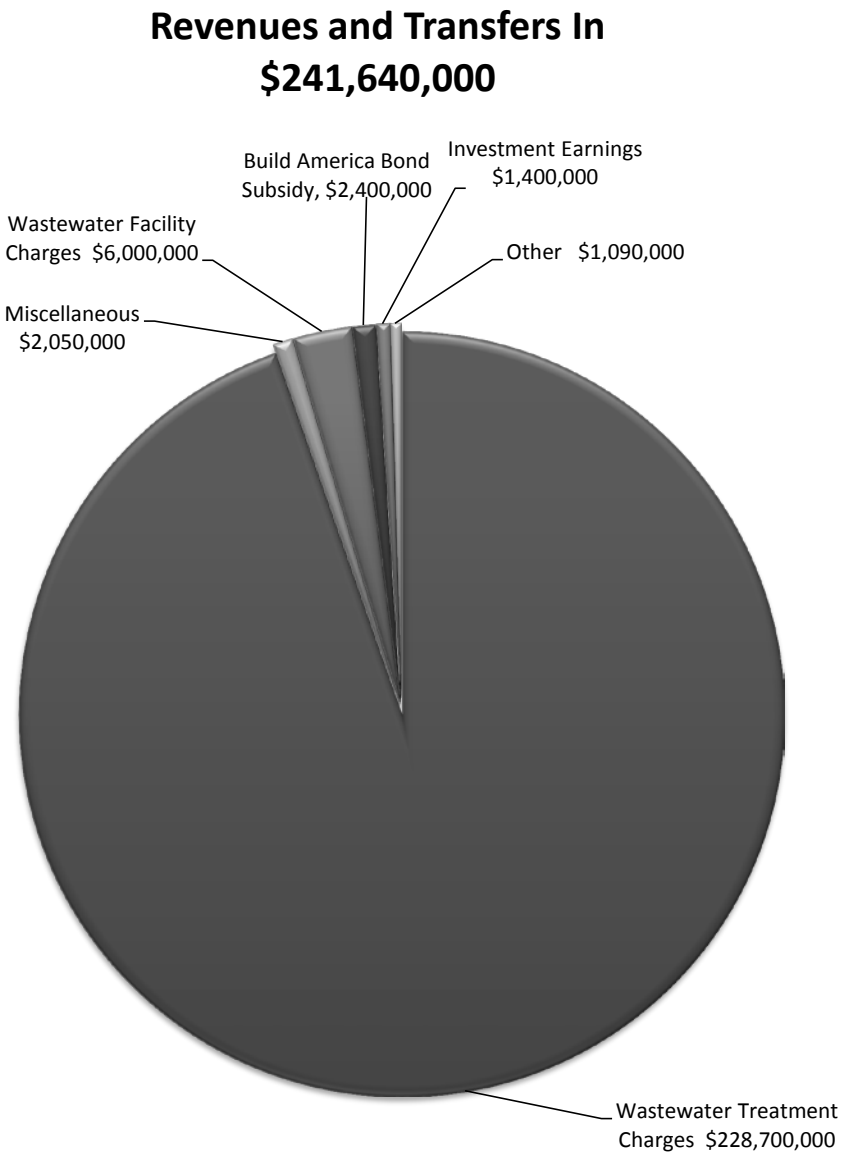
Operating Budget Summary

	FY-2016	Percent of Budget	FY-2015 Budget	Increase/ Decrease	Percent Inc/(Dec)
Personal Services	$ 53,040,035	22.0%	$ 51,826,960	$ 1,213,075	2%
Fringe Benefits	24,385,426	10.1%	22,946,854	1,438,572	6%
Materials & Supplies	5,648,453	2.3%	5,274,151	374,302	7%
Transportation	1,330,169	0.6%	1,392,934	(62,765)	(5%)
Utilities	12,304,591	5.1%	12,491,050	(186,459)	(1%)
Chemical Purchases	8,454,600	3.5%	8,884,600	(430,000)	(5%)
Contractual Services	22,528,143	9.3%	21,284,918	1,243,225	6%
Major Repairs	8,120,920	3.4%	7,468,750	652,170	9%
Capital Assets	2,880,000	1.2%	3,629,083	(749,083)	(21%)
Miscellaneous Expense	2,182,157	0.9%	2,108,180	73,977	4%
Operating Approporiations	140,874,494	58.3%	137,307,480	3,567,014	3%
Debt Service	60,522,000	25.0%	60,387,014	134,986	0%
Transfer to CIP	39,983,506	16.5%	28,915,506	11,068,000	38%
Transfer to Risk Management Reserve	260,000	0.1%	0	260,000	0%
Appropriations for Debt Service and Transfers	100,765,506	41.7%	89,302,520	11,462,986	13%
	$ 241,640,000	100.0%	**$ 226,610,000**	**$ 15,030,000**	7%

Full-time Positions:

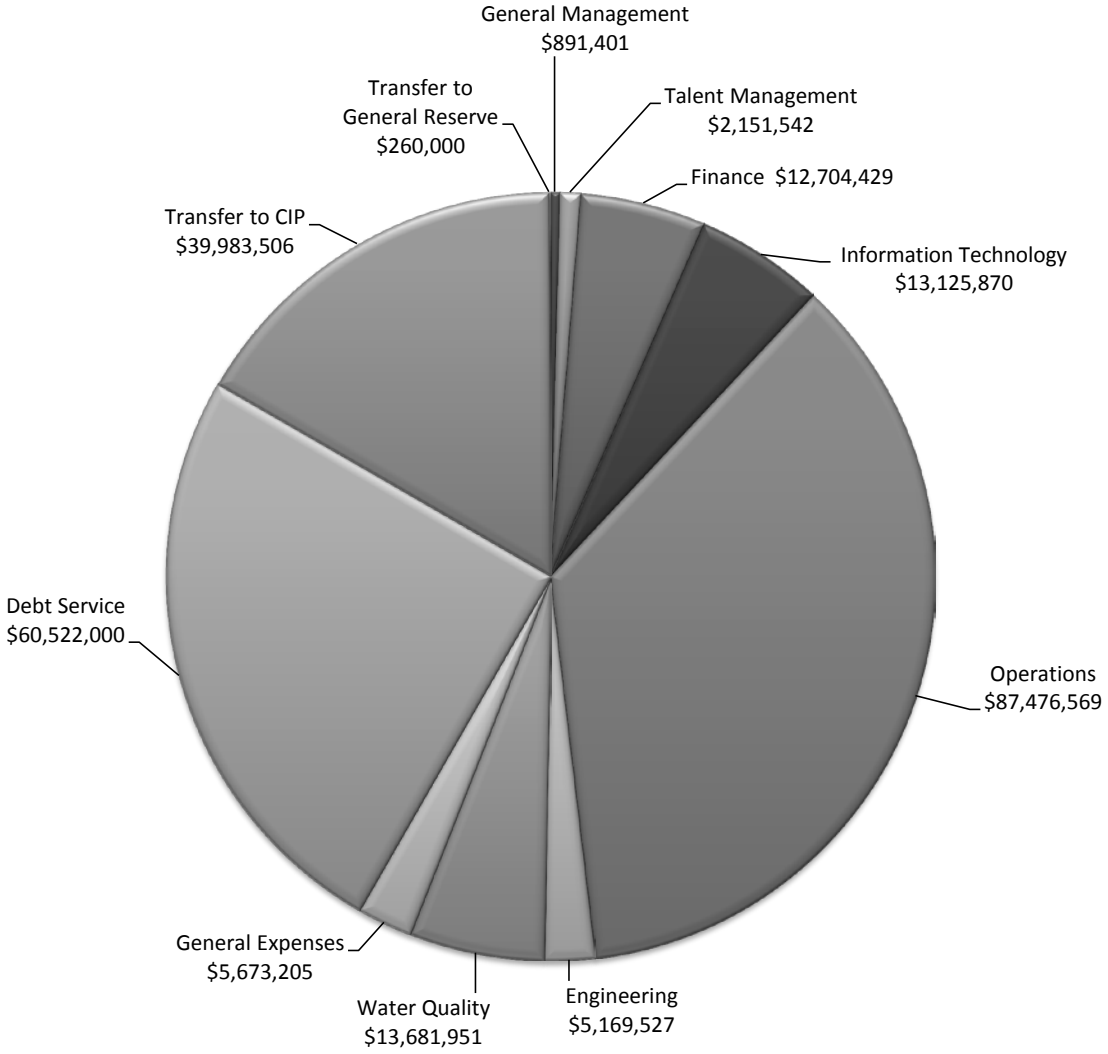
Current	789
Changes	14
Budgeted	803

Operating Budget Charts



Operating Budget Charts

Expenses and Transfers Out
$241,640,000



General Management

The General Manager supervises the department directors, Chief of Communications, Commission Secretary and the Special Assistant for Compliance Assurance. The Communications Division supports HRSD's mission through communications, community outreach and education programs. The Commission Secretary provides administrative support to the General Manager as well as the HRSD Commission. The Special Assistant for Compliance Assurance works closely with representatives of local jurisdictions, DEQ and EPA to ensure appropriate and timely adherence to the requirements of regulatory wet weather enforcement actions.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 583,803	$ 567,821	$ 15,982	3%
Fringe Benefits	178,243	173,976	4,267	2%
Material & Supplies	10,000	10,000	-	0%
Transportation	32,400	32,400	-	0%
Contractual Services	85,000	85,000	-	0%
Major Repairs	-	2,450,000	(2,450,000)	(100%)
Miscellaneous	1,955	1,525	430	28%
Total	**$ 891,401**	**$ 3,320,722**	**$ (2,429,321)**	**(73%)**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
General Manager		1		1		1
Special Assistant for Compliance Assurance	12	1		1		1
Chief of Communications	11	1		1		1
Chief of Human Resources	11	1	(1)	0		0
Training Manager	9	1	(1)	0		0
Human Resources Analyst	8	1	(1)	0		0
Training Superintendent	8	1	(1)	0		0
Human Resources Specialist	7	3	(3)	0		0
Commission Secretary	6	1		1		1
Administrative Coordinator Quality	4	1	(1)	0		0
Human Resources Coordinator	4	2	(2)	0		0
Total		**14**	**(10)**	**4**	**0**	**4**

Talent Management

The Talent Management Department attracts new talent, develops talent and retains existing talent. The department maintains employee records, handles employee recruiting and orientation, administers employee benefits, oversees training and ensures employee safety.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 1,244,291	$ 1,176,739	$ 67,552	6%
Fringe Benefits	505,250	480,651	24,599	5%
Material & Supplies	64,500	62,500	2,000	3%
Transportation	18,300	21,300	(3,000)	(14%)
Contractual Services	79,400	107,200	(27,800)	(26%)
Capital Assets	13,200	-	13,200	100%
Miscellaneous	226,601	193,477	33,124	17%
Total	**$ 2,151,542**	**$ 2,041,867**	**$ 109,675**	**5%**

Positions

	Grade	Adopted * FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Talent Management	12	0		0	1	1
Chief of Human Resources	11	0	1	1	(1)	0
Safety Manager	9	0		0	1	1
Training Manager	9	0	1	1		1
Human Resources Analyst	8	0	1	1		1
Industrial Hygienist	8	0		0	2	2
Training Superintendent	8	0	1	1		1
Human Resources Specialist	7	0	3	3		3
Administrative Coordinator Quality	4	0	1	1		1
Human Resources Coordinator	4	0	2	2		2
Safety Coordinator	4	0		0	1	1
Total		**0**	**10**	**10**	**4**	**14**

* Positions were in General Management budget at date of approval

Finance Department

The Finance Department is responsible for HRSD's general financial and business functions, including financial reporting, investment portfolio, debt and risk management, and customer billing. The Accounting and Finance Division handles fiscal affairs such as preparing statements, budgets, management reports and payroll. The Procurement Division is responsible for purchasing, renting, leasing or otherwise acquiring goods and services, managing vendor relationships and disposing of surplus property. The Customer Care Center Division handles billing, collections, maintenance of customer accounts and liaison with HRSD's customers.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 5,939,017	$ 5,465,934	$ 473,083	9%
Fringe Benefits	2,622,188	2,414,272	207,916	9%
Material & Supplies	128,158	118,311	9,847	8%
Transportation	108,200	104,130	4,070	4%
Utilities	263,291	145,400	117,891	100%
Contractual Services	3,354,732	3,319,669	35,063	1%
Capital Assets	32,500	410,000	(377,500)	(92%)
Miscellaneous	256,343	231,504	24,839	11%
Total	**$ 12,704,429**	**$ 12,209,220**	**$ 495,209**	**4%**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Finance	12	1		1		1
Chief of Accounting & Finance	11	1		1		1
Chief of Customer Care Center (CCC)	11	1		1		1
Chief of Procurement	11	1		1		1
Accounting Manager	9	1		1		1
CCC Manager	9	3		3		3
Internal Auditor	9	1	(1)	0		0
Strategic Sourcing Manager	9	1		1		1
Business Analyst	8	0		0	2	2
Financial Analyst	8	2	1	3	(1)	2
Operations Manager	8	1		1		1
CCC Supervisor	7	5		5	(1)	4
Procurement Analyst	7	1		1		1
Accounts Payable Supervisor	6	1		1		1
Accounts Receivable Specialist	6	3		3		3
Procurement Specialist	6	4		4		4
Payroll Technician	5	1		1		1
Accounting Coordinator	4	1		1		1
Accounts Receivable Technician	4	3		3		3
Administrative Coordinator	4	1	(1)	0		0
CCC Administrative Coordinator	4	1		1		1
CCC Coordinator	4	3		3	1	4
Procurement Coordinator	4	1		1		1
Account Investigator	3	14		14		14
Accounts Payable Assistant	3	3		3	(1)	2
CCC Account Representative	3	33		33	8	41
Procurement Assistant	3	2		2		2
Mail Processing Clerk	2	2		2		2
Total		**92**	**(1)**	**91**	**8**	**99**

Information Technology Department

The Information Technology Department is responsible for HRSD's computer systems, communication systems, network systems, cyber security and data management functions. The Information Technology Operations Division assists HRSD departments in achieving their missions by ensuring all required hardware, storage and network devices are accessible and available to support all business and operational requirements. The Enterprise Data Services Division is responsible for data management, storage and all software supporting HRSD operations. Industrial Controls Division personnel also are responsible for programming industrial controls and automation at HRSD operational facilities.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 3,977,146	$ 3,308,885	$ 668,261	20%
Fringe Benefits	1,496,084	1,254,931	241,153	19%
Material & Supplies	819,600	636,275	183,325	29%
Transportation	53,551	53,551	-	0%
Utilities	1,326,800	1,524,500	(197,700)	(13%)
Contractual Services	4,493,229	3,264,350	1,228,879	38%
Major Repairs	750,000	100,000	650,000	650%
Capital Assets	-	575,000	(575,000)	(100%)
Miscellaneous	209,460	123,775	85,685	69%
Total	**$ 13,125,870**	**$ 10,841,267**	**$ 2,284,603**	**21%**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Information Technology	12	1		1		1
Chief of Enterprise Data Services (EDS)	11	1		1		1
Chief of Industrial Controls	11	0		0	1	1
Chief of Information Technology (IT)	11	1		1		1
Database Administrator	9	3		3		3
Enterprise Architect	9	2	1	3		3
Instrumentation Manager	9	0		0	1	1
Oracle Developer	9	2		2		2
Programmer Development Manager	9	1		1		1
Senior System Engineer	9	5		5		5
System Analysis Manager	9	1		1		1
Industrial Control Systems Manager	8	0		0	4	4
Senior Programmer Analyst	8	6		6		6
Senior System Analyst	8	3		3		3
Unix System Administrator	8	2		2		2
Desktop Support Analyst Supervisor	7	1		1		1
Desktop Support Analyst	6	5		5		5
Web Portal Administrator	6	1		1		1
Information Technology Administrative Coordinator	4	1		1		1
Computer Operator	3	3		3		3
Total		**39**	**1**	**40**	**6**	**46**

Operations Department

The Operations Department is responsible for operating and maintaining all of HRSD's treatment plants, pumps stations, pipelines, buildings and equipment. The department also includes the Director of Water Technology and Research developing new technology with a focus on rapid deployment of innovative solutions. Services are delivered through seven divisions. There are three treatment plant divisions (each with 3 treatment plants) treating wastewater from over 1.5 million people in 13 cities and counties in Hampton Roads. The Small Communities Division operates four smaller treatment plants and all the associated sewer collection systems for four counties on the Middle Peninsula, including the Town of West Point. The Electrical and Energy Management Division supports the electrical and instrumentation maintenance and construction needs of all HRSD facilities. The Interceptor Division operates and maintains 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 and operates two carpentry shops and a full service machine shop.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 31,641,821	$ 32,366,360	$ (724,539)	(2%)
Fringe Benefits	14,814,423	14,239,075	575,348	4%
Material & Supplies	3,468,300	3,411,700	56,600	2%
Transportation	886,000	961,050	(75,050)	(8%)
Utilities	10,179,500	10,286,150	(106,650)	(1%)
Chemicals	8,454,600	8,884,600	(430,000)	(5%)
Contractual Services	8,521,700	8,897,427	(375,727)	(4%)
Major Repairs	6,518,600	4,669,325	1,849,275	40%
Capital Assets	2,182,300	1,904,000	278,300	15%
Miscellaneous	809,325	727,650	81,675	11%
Total	**$ 87,476,569**	**$ 86,347,337**	**$ 1,129,232**	**1%**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Operations	12	1		1		1
Director of Water Technology and Research	12	0		0	1	1
Chief of Facilities Support	11	1		1		1
Chief of Interceptor Operations - NS	11	1		1		1
Chief of Interceptor Operations - SS	11	1		1		1
Chief of Small Communities	11	1		1	(1)	0
Chief of Special Projects	11	1		1	(1)	0
Chief of Treatment - NS	11	1		1	(1)	0
Chief of Treatment - SS	11	1		1	(1)	0
Senior Plant Manager	9	0		0	3	3
Electrical Manager	9	2		2		2
Instrumentation Manager	9	1		1	(1)	0
Interceptor Engineer	9	2	1	3		3
Physical Plant Maintenance Manager	9	1		1	(1)	0
Plant Manager	9	9		9	(3)	6
Process Engineer	9	0		0	1	1
Recycling Manager	9	1		1	(1)	0
Safety Manager	9	1		1	(1)	0
Support System Manager	9	0		0	1	1
System Manager	9	2		2		2
Automotive Superintendent	8	1		1		1
Facility Superintendent	8	1		1		1
Electrical Superintendent	8	1		1		1
Industrial Control Manager	8	5		5	(4)	1
Industrial Hygienist	8	2		2	(2)	0
Instrument Supervisor	8	2		2		2
Interceptor Superintendent	8	3		3		3
Maintenance Superintendent	8	0		0	1	1
Mechanical Superintendent	8	1		1	(1)	0

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Plant Superintendent	8	9		9		9
Superintendent	8	0		0	9	9
Chief Operator	7	10		10	(9)	1
Electrical Supervisor	7	2		2		2
Inspector, Structural/Roofing	7	1		1		1
Instrumentation Specialist	7	27		27		27
Interceptor Chief Foreman	7	5		5		5
OTIS Specialist	7	1		1		1
Automotive Foreman	6	2		2		2
CMMS Analyst	6	1		1	(1)	0
Condition Assessment Supervisor	6	1		1		1
Electrician	6	28		28		28
Engineering Assistant	6	4	(1)	3		3
Interceptor Foreman	6	7		7		7
Interceptor System Supervisor	6	1		1		1
Lead Operator	6	31		31		31
Machinist Foreman	6	1		1		1
Maintenance Specialist	6	2		2	0	2
Pump Station Supervisor	6	1		1		1
SCADA Technician	6	1		1		1
Automotive Technician	5	5		5		5
Carpenter	5	4		4		4
Equipment Technician	5	4		4		4
Facility Maintenance Technician	5	2		2		2
Interceptor Technician	5	29		29	(1)	28
Machinist	5	3		3		3
Maintenance Operator	5	56		56		56
Plant Operator	5	73		73		73
Administrative Coordinator	4	2		2		2
Heavy Equipment Operator 1	4	22		22		22
Materials Operations Coordinator	4	2		2		2
Operations Coordinator	4	1		1		1
Safety Coordinator	4	1		1	(1)	0
Utility Locator	4	1		1		1
Automotive Assistant	3	1		1		1
CMMS Administrative Assistant	3	1		1	(1)	0
PPM Administrative Assistant	3	1		1		1
Utility Administrative Assistant	3	2		2		2
SCADA Administrative Assistant	3	1		1		1
Interceptor Assistant	2	30		30	(2)	28
Maintenance Operations Assistant	2	56		56	(1)	55
Plant Clerk	2	9		9		9
Facility Assistant	1	12		12		12
Subtotal - Operations		**496**	**0**	**496**	**(18)**	**478**
Small Communities						
Systems Manager	9	1		1		1
Small Communities Superintendent	8	0		0	1	1
Chief Operator	7	1		1		1
Lead Operator	6	3		3		3
Maintenance Operator	5	9		9	2	11
Administrative Coordinator	4	1		1		1
Heavy Equipment Operator 2	3	1		1		1
Maintenance Operations Assistant	2	1		1	1	2
Subtotal - Small Communities		**17**	**0**	**17**	**4**	**21**
Total		**513**	**0**	**513**	**(14)**	**499**

Engineering Department

The Engineering Department is responsible for HRSD facility planning, design and construction and related support. The Asset Management Division is responsible for managing asset information including condition to inform all maintenance, replacement and capital planning decisions. The Design and Construction Division works with consultants and contractors to ensure that work is performed in a manner consistent with our quality standards. The Planning and Analysis Division manages the Capital Improvement Program, Hydraulic Modeling, Geographic Information System (GIS), Data Analysis and Records Management System and plans the infrastructure required to meet the region's future wastewater needs.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 3,392,629	$ 2,981,854	$ 410,775	14%
Fringe Benefits	1,275,940	1,135,617	140,323	12%
Material & Supplies	22,120	25,390	(3,270)	(13%)
Transportation	68,288	54,353	13,935	26%
Contractual Services	259,512	222,462	37,050	17%
Major Repairs	50,000	-	50,000	0%
Capital Assets	-	95,000	(95,000)	(100%)
Miscellaneous	101,038	71,409	29,629	41%
Total	**$ 5,169,527**	**$ 4,586,085**	**$ 583,442**	**13%**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Engineering	12	1		1		1
Chief of Asset Management	11	0		0	1	1
Chief of Design & Construction	11	2		2		2
Chief of Planning & Analysis	11	1		1		1
Capital Program Manager	9	1		1		1
Data Analysis Manager	9	1		1		1
GIS Manager	9	1		1		1
Hydraulic Analysis Manager	9	4		4		4
Project Manager	9	9		9	1	10
Real Estate Manager	9	0		0	1	1
Data Analyst	7	3		3		3
CMMS Analyst	6	0		0	1	1
Community Liaison	6	1		1		1
Contract Specialist	6	2		2		2
Engineering Assistant	6	1		1	(1)	0
GIS Analyst	6	2		2		2
CAD/GIS Technician	5	3		3		3
Data Technician	5	1		1		1
Administrative Coordinator	4	1		1		1
CMMS Administrative Assistant	3	0		0	1	1
Engineering Clerk	2	1		1		1
Total		**35**	**0**	**35**	**4**	**39**

Water Quality Department

The Water Quality 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 efforts through the work of three divisions. The Laboratory Division provides analytical support for numerous monitoring, research and regulatory purposes. The Pretreatment and Pollution Prevention Division monitors wastewater conveyed to treatment plants and implements its industrial permit regulations to protect treatment plant staff, facilities and processes. The Technical Services Division is responsible for a number of activities including environmental monitoring, specialized sampling, treatment process and research studies as well as all reporting required by HRSD permits.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ 6,861,328	$ 6,559,367	$ 301,961	5%
Fringe Benefits	2,929,743	2,684,777	244,966	9%
Material & Supplies	1,075,775	949,975	125,800	13%
Transportation	163,430	166,150	(2,720)	(2%)
Contractual Services	756,820	746,510	10,310	1%
Major Repairs	802,320	249,425	552,895	222%
Capital Assets	652,000	645,083	6,917	1%
Miscellaneous	440,535	414,140	26,395	6%
Total	**$ 13,681,951**	**$ 12,415,427**	**$ 1,266,524**	**10%**

Positions

	Grade	Adopted FY-2015	Adjustments	Final FY-2015	Adjustments	FY-2016
Director of Water Quality (WQ)	12	1		1		1
Chief of Central Environmental Laboratory (CEL)	11	1		1		1
Chief of Pretreatment & Pollution Prevention (P3)	11	1		1		1
Chief of Technical Services Division (TSD)	11	1		1		1
Quality Assurance Manager	9	1		1		1
Environmental Scientist	9	5		5	1	6
Laboratory Manager	9	4		4		4
P3 Manager	9	4		4		4
Permit Manager	9	1		1		1
Recycling Manager	9	0		0	1	1
Laboratory Operations Manager	8	1		1		1
Technical Service Operations Manager	8	1		1		1
Chemist	7	10		10	1	11
EDMS Administrator	7	1		1		1
P3 Supervising Specialist	7	2		2		2
TSD Supervising Specialist	7	3		3		3
CEL Quality Assurance Specialist	6	1		1	1	2
EDMS Analyst	6	1		1		1
WQ Specialist	6	17		17	1	18
Laboratory Technician	5	5		5		5
P3 Administrative Technician	5	1		1		1
WQTechnician	5	14		14		14
P3 Coordinator	4	1		1		1
WQ Administrative Coordinator	4	1		1		1
WQ Operations Coordinator	4	1		1		1
CEL Administrative Assistant	3	2		2		2
P3 Administrative Assistant	3	2		2		2
WQ Investigator	3	6		6	1	7
Laboratory Assistant	2	6		6		6
TSD Assistant	2	1		1		1
Total		**96**	**0**	**96**	**6**	**102**

General Expenses, Debt Service and Transfers

General Expenses includes operating expenditures not assigned to any specific HRSD Department.

Expenditure Budget

	FY-2016 Budget	FY-2015 Budget	Increase/ (Decrease)	Percentage Change
Personal Services	$ (600,000)	$ (600,000)	$ -	0%
Fringe Benefits	563,555	563,555	-	0%
Material & Supplies	60,000	60,000	-	0%
Utilities	535,000	535,000	-	0%
Contractual Services	4,977,750	4,642,300	335,450	7%
Miscellaneous Expenses	136,900	344,700	(207,800)	(60%)
Total General Expenses	**$ 5,673,205**	**$ 5,545,555**	**$ 127,650**	**2%**
Publically Sold Bonds - Principal	$ 18,780,000	$ 19,600,000	$ (820,000)	(4%)
Publically Sold Bonds - Interest	26,906,584	26,190,997	715,587	3%
VRLF Bonds	13,935,416	14,096,017	(160,601)	(1%)
Cost of Issuance	900,000	500,000	400,000	100%
Subtotal - Debt Service	60,522,000	60,387,014	134,986	0%
Transfer to CIP	39,983,506	28,915,506	11,068,000	38%
Transfer to Risk Management	260,000	-	260,000	0%
Subtotal - Transfers	40,243,506	28,915,506	11,328,000	39%
Total Debt Service and Transfers	**$ 100,765,506**	**$ 89,302,520**	**$ 11,462,986**	**13%**

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-2016 in the amount of $155 million. The remaining years (FY-2017 to FY-2025) 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-2016 to FY-2025 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 $1.4 billion.

CIP Budget Forecast (in thousands)	**Total FY-2016 to FY-2025**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**
Beginning Capital Reserves	$ 32,632	$ 32,632	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bonds	$ 641,167	68,084	58,366	55,580	67,939	85,405	72,243	48,291	78,482	45,323	61,454
Cash	$ 708,601	39,984	49,834	54,320	57,061	56,195	60,757	80,709	78,518	110,177	121,046
Grants and Other Reimbursements	$ 38,100	14,300	11,800	10,100	-	1,900	-	-	-	-	-
Transfer from Debt Serv. Res. Fund	$ 27,000	-	-	-	-	-	-	-	-	27,000	-
Total Capital Resources	$ 1,447,500	155,000	120,000	120,000	125,000	143,500	133,000	129,000	157,000	182,500	182,500
Capital Expenditures	$ 1,447,500	155,000	120,000	120,000	125,000	143,500	133,000	129,000	157,000	182,500	182,500
Ending Capital Reserves	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Capital Expenditures (in thousands)	**Total FY-2016 to FY-2025**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**
Administration	$ 6,776	$ 5,962	$ 814	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Army Base	$ 36,379	9,154	4,264	4,351	14,888	3,722	-	-	-	-	-
Atlantic	$ 79,680	7,534	4,574	13,491	20,739	17,645	6,463	1,264	4,034	3,937	-
Boat Harbor	$ 95,544	15,002	15,368	8,124	7,466	7,132	12,375	7,849	2,237	10,736	9,253
Chesapeake-Elizabeth	$ 110,615	1,106	4,921	7,191	22,119	36,681	23,509	9,103	4,691	1,295	-
James River	$ 90,286	17,213	9,109	6,801	6,740	6,116	5,966	1,274	7,701	18,069	11,296
Middle Peninsula	$ 33,273	3,912	4,509	8,180	7,209	7,173	1,832	458	-	-	-
Nansemond	$ 70,267	8,075	13,557	12,601	6,872	10,054	9,145	3,567	1,597	3,786	1,014
Virginia Initiative Plant	$ 170,439	48,342	29,818	33,853	7,623	3,391	10,037	15,837	10,771	7,828	2,939
Williamsburg	$ 26,987	2,929	4,518	2,372	2,616	576	2,734	3,229	4,501	3,512	-
York River	$ 38,742	12,384	2,940	346	1,133	2,857	2,315	6,393	7,340	2,998	35
General	$ 129,813	23,387	23,254	16,976	8,242	8,339	6,414	11,402	11,009	9,804	10,987
Future Improvements	$ 500,512	-	-	-	13,402	32,981	45,876	62,481	95,641	111,845	138,285
Subtotal	$ 1,389,315	155,000	117,647	114,286	119,048	136,667	126,667	122,858	149,524	173,810	173,810
Contingency	$ 58,185	-	2,353	5,714	5,952	6,833	6,333	6,143	7,476	8,690	8,690
Total Expenditures	$ 1,447,500	$ 155,000	$ 120,000	$ 120,000	$ 125,000	$ 143,500	$ 133,000	$ 129,000	$ 157,000	$ 182,500	$ 182,500

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

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

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

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2016 to FY-2025	FY16	FY17	FY18	FY19
Administration						
AD010400	Environmental Data Management System	$ 382	$ 352	$ 30	$ -	$ -
AD011700	Enterprise Resource Management System	$ 2,383	$ 2,383	$ -	$ -	$ -
AD011800	Central Environmental Laboratory Roof Replacement	$ 1,490	$ 705	$ 784	$ -	$ -
AD011900	Central Environmental Laboratory HVAC	$ 2,522	$ 2,522	$ -	$ -	$ -
	Subtotal	$ 6,776	$ 5,962	$ 814	$ -	$ -
Army Base						
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	$ 22,438	$ -	$ 1,421	$ 3,974	$ 13,634
AB010100	Army Base Treatment Plant Improvements - Phase III	$ 10,000	$ 8,000	$ 2,000	$ -	$ -
AB010500	Section W Force Main Replacement	$ 2,099	$ -	$ 155	$ 376	$ 1,254
AB011300	Army Base Treatment Plant Administration Complex	$ 1,375	$ 688	$ 688	$ -	$ -
AB011500	Buckman Avenue Force Main Replacement	$ 467	$ 467	$ -	$ -	$ -
	Subtotal	$ 36,379	$ 9,154	$ 4,264	$ 4,351	$ 14,888
Atlantic						
AT011410	Providence Road Interim Pressure Reducing Station	$ 624	$ 220	$ 220	$ 184	$ -
AT011420	Providence Road Pressure Reducing Station Modifications	$ 4,419	$ 59	$ 495	$ 260	$ 1,804
AT011510	Shipps Corner Interim Pressure Reducing Station	$ 2,589	$ 208	$ 896	$ 1,485	$ -
AT011520	Shipps Corner Pressure Reducing Station Modifications	$ 4,733	$ -	$ 53	$ 126	$ 118
AT011610	Courthouse Interim Pressure Reducing Station	$ 1,993	$ 1,993	$ -	$ -	$ -
AT011800	Kempsville Road Interceptor Force Main Replacement -Phase I	$ 8,261	$ -	$ 137	$ 282	$ 1,516
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	$ 4,251	$ -	$ -	$ -	$ -
AT012000	Atlantic Treatment Plant Administration Building Renovation and Expansion	$ 2,242	$ 508	$ 1,734	$ -	$ -
AT012300	Dominion Boulevard Force Main Relocations (Chesapeake)	$ 20	$ 20	$ -	$ -	$ -
AT012910	Atlantic Treatment Plant FOG Receiving Station	$ 3,559	$ 294	$ -	$ 944	$ 1,364
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	$ 1,107	$ -	$ -	$ 4	$ 58
AT013100	South Norfolk Area Gravity Sewer Improvements	$ 4,346	$ -	$ -	$ -	$ -
AT013200	Doziers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	$ 233	$ -	$ -	$ -	$ 6
AT013310	Atlantic Treatment Plant Primary Scum Removal Pilot	$ 888	$ 178	$ 710	$ -	$ -
AT013320	Atlantic Treatment Plant Primary Clarifiers 1 – 4 Automated Scum Removal	$ 1,557	$ -	$ 60	$ 204	$ 1,175
AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	$ 38,095	$ 3,855	$ -	$ 9,707	$ 14,697
AT013600	Atlantic Treatment Plant Motor Control Center Replacements	$ 466	$ 198	$ 268	$ -	$ -
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	$ 295	$ -	$ -	$ 295	$ -
	Subtotal	$ 79,680	$ 7,534	$ 4,574	$ 13,491	$ 20,739
Boat Harbor						
BH010000	33rd Street Pump Station Replacement/Rehabilitation	$ 6,196	$ 2,378	$ 3,378	$ 440	$ -
BH010100	58th Street Connecting Sewer Rehabilitation	$ 179	$ 179	$ -	$ -	$ -
BH011200	Hampton Trunk Sewer Division A Replacement	$ 2,054	$ 2,054	$ -	$ -	$ -
BH011600	Bridge Street Pump Station Replacement	$ 5,521	$ 1,388	$ 3,100	$ 1,033	$ -
BH012000	Hampton Trunk Sewer Extension Division E Gravity Replacement	$ 1,659	$ 4	$ 501	$ 1,155	$ -
BH012700	Hampton Trunk Sewer Extension Division B - Claremont Force Main Replacement	$ 4,433	$ 201	$ -	$ 1,956	$ 2,277
BH013000	Willard Avenue Pump Station Upgrades	$ 1,929	$ 127	$ 651	$ 1,150	$ -
BH013100	Victoria Boulevard Pump Station	$ 1,372	$ 1,372	$ -	$ -	$ -
BH013400	Bridge Street Siphon and Vent Relocation/Replacement	$ 699	$ 453	$ 246	$ -	$ -
BH013500	Boat Harbor East and West Raw Influent Chamber Rehabilitation	$ 261	$ 261	$ -	$ -	$ -
BH013700	Ferguson Park Interceptor Force Main – Bridge Span Relocation	$ 761	$ 761	$ -	$ -	$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	$ 3,061	$ -	$ -	$ -	$ -
BH014210	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase I	$ 668	$ 481	$ 187	$ -	$ -
BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase II	$ 11,577	$ 134	$ 269	$ 691	$ 2,269
BH014300	Hampton Roads Avenue Pump Station, Force Main and Gravity System	$ 5,539	$ -	$ -	$ -	$ -
BH014400	County Street Pump Station and Off-Line Storage	$ 17,712	$ -	$ -	$ -	$ -
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	$ 1,896	$ 89	$ 643	$ 1,164	$ -
BH014600	46th Street Diversion Sewer Rehabilitation/Replacement	$ 9,265	$ -	$ -	$ 268	$ 322
BH014700	Boat Harbor Outlet Sewer Improvements	$ 2,741	$ 39	$ 156	$ 120	$ 1,463
BH014800	Jefferson Avenue Extension Gravity Improvements	$ 1,699	$ 6	$ 92	$ 89	$ 858

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	FY20	FY21	FY22	FY23	FY24	FY25
Administration							
AD010400	Environmental Data Management System	$ -	$ -	$ -	$ -	$ -	$ -
AD011700	Enterprise Resource Management System	$ -	$ -	$ -	$ -	$ -	$ -
AD011800	Central Environmental Laboratory Roof Replacement	$ -	$ -	$ -	$ -	$ -	$ -
AD011900	Central Environmental Laboratory HVAC	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ -	$ -	$ -	$ -	$ -	$ -
Army Base							
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	$ 3,409	$ -	$ -	$ -	$ -	$ -
AB010100	Army Base Treatment Plant Improvements - Phase III	$ -	$ -	$ -	$ -	$ -	$ -
AB010500	Section W Force Main Replacement	$ 314	$ -	$ -	$ -	$ -	$ -
AB011300	Army Base Treatment Plant Administration Complex	$ -	$ -	$ -	$ -	$ -	$ -
AB011500	Buckman Avenue Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 3,722	$ -	$ -	$ -	$ -	$ -
Atlantic							
AT011410	Providence Road Interim Pressure Reducing Station	$ -	$ -	$ -	$ -	$ -	$ -
AT011420	Providence Road Pressure Reducing Station Modifications	$ 1,800	$ -	$ -	$ -	$ -	$ -
AT011510	Shipps Corner Interim Pressure Reducing Station	$ -	$ -	$ -	$ -	$ -	$ -
AT011520	Shipps Corner Pressure Reducing Station Modifications	$ 1,062	$ 3,115	$ 260	$ -	$ -	$ -
AT011610	Courthouse Interim Pressure Reducing Station	$ -	$ -	$ -	$ -	$ -	$ -
AT011800	Kempsville Road Interceptor Force Main Replacement -Phase I	$ 4,465	$ 1,861	$ -	$ -	$ -	$ -
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	$ -	$ 15	$ 160	$ 1,731	$ 2,346	$ -
AT012000	Atlantic Treatment Plant Administration Building Renovation and Expansion	$ -	$ -	$ -	$ -	$ -	$ -
AT012300	Dominion Boulevard Force Main Relocations (Chesapeake)	$ -	$ -	$ -	$ -	$ -	$ -
AT012910	Atlantic Treatment Plant FOG Receiving Station	$ 886	$ 72	$ -	$ -	$ -	$ -
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	$ 42	$ 384	$ 620	$ -	$ -	$ -
AT013100	South Norfolk Area Gravity Sewer Improvements	$ 62	$ 226	$ 164	$ 2,303	$ 1,591	$ -
AT013200	Doziers Corner Pump Station and Washington District Pump Station Flooding Mitigation Improvements	$ 19	$ 147	$ 61	$ -	$ -	$ -
AT013310	Atlantic Treatment Plant Primary Scum Removal Pilot	$ -	$ -	$ -	$ -	$ -	$ -
AT013320	Atlantic Treatment Plant Primary Clarifiers 1 – 4 Automated Scum Removal	$ 117	$ -	$ -	$ -	$ -	$ -
AT013500	Atlantic Treatment Plant Thermal Hydrolysis Process	$ 9,191	$ 645	$ -	$ -	$ -	$ -
AT013600	Atlantic Treatment Plant Motor Control Center Replacements	$ -	$ -	$ -	$ -	$ -	$ -
AT013700	Atlantic Trunk Interceptor Force Main Relocation (VDOT Laskin Road Betterment)	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 17,645	$ 6,463	$ 1,264	$ 4,034	$ 3,937	$ -
Boat Harbor							
BH010000	33rd Street Pump Station Replacement/Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
BH010100	58th Street Connecting Sewer Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
BH011200	Hampton Trunk Sewer Division A Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH011600	Bridge Street Pump Station Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH012000	Hampton Trunk Sewer Extension Division E Gravity Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH012700	Hampton Trunk Sewer Extension Division B - Claremont Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH013000	Willard Avenue Pump Station Upgrades	$ -	$ -	$ -	$ -	$ -	$ -
BH013100	Victoria Boulevard Pump Station	$ -	$ -	$ -	$ -	$ -	$ -
BH013400	Bridge Street Siphon and Vent Relocation/Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH013500	Boat Harbor East and West Raw Influent Chamber Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
BH013700	Ferguson Park Interceptor Force Main – Bridge Span Relocation	$ -	$ -	$ -	$ -	$ -	$ -
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	$ 83	$ 872	$ 2,105	$ -	$ -	$ -
BH014210	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase I	$ -	$ -	$ -	$ -	$ -	$ -
BH014220	Hampton Trunk Sewer Extension Divisions I and J Relocation Phase II	$ 4,277	$ 3,925	$ 11	$ -	$ -	$ -
BH014300	Hampton Roads Avenue Pump Station, Force Main and Gravity System	$ -	$ 140	$ 247	$ 1,463	$ 3,400	$ 288
BH014400	County Street Pump Station and Off-Line Storage	$ -	$ 101	$ 538	$ 772	$ 7,336	$ 8,965
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	$ -	$ -	$ -	$ -	$ -	$ -
BH014600	46th Street Diversion Sewer Rehabilitation/Replacement	$ 915	$ 4,653	$ 3,105	$ 2	$ -	$ -
BH014700	Boat Harbor Outlet Sewer Improvements	$ 964	$ -	$ -	$ -	$ -	$ -
BH014800	Jefferson Avenue Extension Gravity Improvements	$ 654	$ -	$ -	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2016 to FY-2025	FY16	FY17	FY18	FY19
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	$ 2,972	$ -	$ -	$ 32	$ 161
BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	$ 5,843	$ 1,983	$ 3,845	$ 15	$ -
BH015100	Bloxoms Corner Force Main Replacement	$ 2,114	$ -	$ -	$ 12	$ 116
BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacements	$ 5,065	$ 2,764	$ 2,301	$ -	$ -
BH015400	Boat Harbor Treatment Plant Furnace Automation	$ 328	$ 328	$ -	$ -	$ -
	Subtotal	$ 95,544	$ 15,002	$ 15,368	$ 8,124	$ 7,466
Chesapeake-Elizabeth						
CE010000	Lynnhaven and Western Trunk Force Main Chlorine Injection Vault Demolitions	$ 222	$ 222	$ -	$ -	$ -
CE010400	Independence Boulevard Pressure Reducing Station Modifications	$ 1,752	$ -	$ 97	$ 97	$ 1,299
CE010510	Newtown Road Force Main Valving	$ 1,041	$ 92	$ 219	$ 730	$ -
CE010520	Newtown Road Interceptor Force Main Relocation	$ 6,844	$ -	$ 65	$ 289	$ 264
CE010700	Quail Street Pressure Reducing Station Replacement/Rehabilitation	$ 3,293	$ -	$ -	$ 27	$ 81
CE011200	Central Trunk Interceptor Force Main A & B Main Line Valves	$ 2,483	$ 476	$ 2,006	$ -	$ -
CE011300	Birchwood Trunk 24-Inch and 30-Inch Force Main at Independence Boulevard Replacement Phase II	$ 949	$ -	$ -	$ -	$ -
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	$ 543	$ -	$ -	$ -	$ -
CE011700	Western Trunk Force Main Replacement	$ 6,501	$ 315	$ 221	$ 214	$ 2,757
CE011810	Chesapeake-Elizabeth Regional Off-Line Storage Facility	$ 23,407	$ -	$ -	$ -	$ 662
CE011820	Chesapeake-Elizabeth Interceptor System Diversion Improvements	$ 63,580	$ -	$ 2,312	$ 5,835	$ 17,056
	Subtotal	$ 110,615	$ 1,106	$ 4,921	$ 7,191	$ 22,119
James River						
JR010100	Center Avenue Pump Station Service Area I/I Remediation	$ 262	$ 262	$ -	$ -	$ -
JR010600	Lucas Creek Pump Station Upgrade	$ 2,106	$ -	$ 26	$ 263	$ 1,668
JR010820	Warwick Boulevard to James River Influent Force Main Section 2	$ 10,668	$ 8,446	$ 2,126	$ -	$ -
JR011000	Middle Ground Boulevard - City Center Interconnect Force Main	$ 313	$ 313	$ -	$ -	$ -
JR011100	Warwick Boulevard to James River Influent Force Main Section 1	$ 5,119	$ -	$ 1,019	$ 3,009	$ 1,091
JR011300	Patrick Henry Pump Station Interconnection Force Main	$ 2,897	$ -	$ -	$ -	$ -
JR011500	Center Avenue I&I Remediation Phase II	$ 2,159	$ 362	$ 1,797	$ -	$ -
JR011600	Patrick Henry Pump Station/Pressure Reducing Station	$ 6,002	$ -	$ -	$ -	$ -
JR011710	Jefferson Avenue Interceptor Force Main Replacement Phase I	$ 105	$ 105	$ -	$ -	$ -
JR011720	Jefferson Avenue Interceptor Force Main Replacement Phase II	$ 2,390	$ 2,173	$ 217	$ -	$ -
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	$ 8,745	$ -	$ 140	$ 198	$ 594
JR012010	Warwick Boulevard to James River Influent Force Main Section 3, Phase 1	$ 1,874	$ 1,874	$ -	$ -	$ -
JR012020	Warwick Boulevard to James River Influent Force Main Section 3, Phase 2	$ 3,842	$ 944	$ 2,477	$ 420	$ -
JR012100	Huxley Place to Middle Ground Boulevard Force Main Extension	$ 1,993	$ 19	$ 195	$ 1,001	$ 778
JR012200	Middle Ground Boulevard Off-Line Storage	$ 6,537	$ -	$ -	$ -	$ -
JR012300	Patrick Henry Off-Line Storage	$ 11,260	$ -	$ -	$ -	$ -
JR012400	Center Avenue & Morrison Pump Station Capacity Improvements	$ 12,684	$ -	$ -	$ -	$ -
JR012700	Triton Court Discharge Force Main	$ 1,730	$ 1,730	$ -	$ -	$ -
JR012800	James River Treatment Plant Hydraulic Improvements	$ 669	$ 512	$ 157	$ -	$ -
JR012900	James River Treatment Plant Centrate Equalization Improvements	$ 946	$ 388	$ 558	$ -	$ -
JR013000	Morrison Pump Station Discharge Force Main Replacement & Capacity Enhancements	$ 1,160	$ 26	$ 82	$ 381	$ 672
JR013100	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase I	$ 2,630	$ 60	$ 220	$ 1,342	$ 1,008
JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	$ 4,197	$ -	$ 94	$ 187	$ 929
	Subtotal	$ 90,286	$ 17,213	$ 9,109	$ 6,801	$ 6,740
Middle Peninsula						
MP011100	Urbanna and Central Middlesex Treatment Plants Replacement and Expansion	$ 14,242	$ 284	$ 284	$ 2,506	$ 5,826
MP011200	Central Middlesex Collection System	$ 4,332	$ -	$ 52	$ 104	$ 54
MP011400	Mathews Collection System Vacuum Valve Replacement	$ 787	$ 241	$ 241	$ 305	$ -
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	$ 4,728	$ 1,163	$ 1,855	$ 1,710	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	FY20	FY21	FY22	FY23	FY24	FY25
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	$ 135	$ 1,599	$ 1,045	$ -	$ -	$ -
BH015000	Orcutt Avenue and Mercury Blvd Gravity Sewer Improvements	$ -	$ -	$ -	$ -	$ -	$ -
BH015100	Bloxoms Corner Force Main Replacement	$ 104	$ 1,085	$ 797	$ -	$ -	$ -
BH015300	Boat Harbor Treatment Plant Switchgear and Controls Replacements	$ -	$ -	$ -	$ -	$ -	$ -
BH015400	Boat Harbor Treatment Plant Furnace Automation	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 7,132	$ 12,375	$ 7,849	$ 2,237	$ 10,736	$ 9,253
Chesapeake-Elizabeth							
CE010000	Lynnhaven and Western Trunk Force Main Chlorine Injection Vault Demolitions	$ -	$ -	$ -	$ -	$ -	$ -
CE010400	Independence Boulevard Pressure Reducing Station Modifications	$ 260	$ -	$ -	$ -	$ -	$ -
CE010510	Newtown Road Force Main Valving	$ -	$ -	$ -	$ -	$ -	$ -
CE010520	Newtown Road Interceptor Force Main Relocation	$ 3,115	$ 3,111	$ -	$ -	$ -	$ -
CE010700	Quail Street Pressure Reducing Station Replacement/Rehabilitation	$ 85	$ 675	$ 1,616	$ 808	$ -	$ -
CE011200	Central Trunk Interceptor Force Main A & B Main Line Valves	$ -	$ -	$ -	$ -	$ -	$ -
CE011300	Birchwood Trunk 24-Inch and 30-Inch Force Main at Independence Boulevard Replacement Phase II	$ -	$ -	$ -	$ 1	$ 948	$ -
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	$ -	$ 6	$ 35	$ 156	$ 347	$ -
CE011700	Western Trunk Force Main Replacement	$ 2,994	$ -	$ -	$ -	$ -	$ -
CE011810	Chesapeake-Elizabeth Regional Off-Line Storage Facility	$ 4,114	$ 7,452	$ 7,452	$ 3,726	$ -	$ -
CE011820	Chesapeake-Elizabeth Interceptor System Diversion Improvements	$ 26,113	$ 12,264	$ -	$ -	$ -	$ -
	Subtotal	$ 36,681	$ 23,509	$ 9,103	$ 4,691	$ 1,295	$ -
James River							
JR010100	Center Avenue Pump Station Service Area I/I Remediation	$ -	$ -	$ -	$ -	$ -	$ -
JR010600	Lucas Creek Pump Station Upgrade	$ 149	$ -	$ -	$ -	$ -	$ -
JR010820	Warwick Boulevard to James River Influent Force Main Section 2	$ -	$ 96	$ -	$ -	$ -	$ -
JR011000	Middle Ground Boulevard - City Center Interconnect Force Main	$ -	$ -	$ -	$ -	$ -	$ -
JR011100	Warwick Boulevard to James River Influent Force Main Section 1	$ -	$ -	$ -	$ -	$ -	$ -
JR011300	Patrick Henry Pump Station Interconnection Force Main	$ -	$ -	$ 75	$ 602	$ 1,567	$ 653
JR011500	Center Avenue I&I Remediation Phase II	$ -	$ -	$ -	$ -	$ -	$ -
JR011600	Patrick Henry Pump Station/Pressure Reducing Station	$ -	$ -	$ 147	$ 605	$ 2,799	$ 2,451
JR011710	Jefferson Avenue Interceptor Force Main Replacement Phase I	$ -	$ -	$ -	$ -	$ -	$ -
JR011720	Jefferson Avenue Interceptor Force Main Replacement Phase II	$ -	$ -	$ -	$ -	$ -	$ -
JR011730	Jefferson Avenue Interceptor Force Main Replacement Phase III	$ 3,722	$ 4,090	$ -	$ -	$ -	$ -
JR012010	Warwick Boulevard to James River Influent Force Main Section 3, Phase 1	$ -	$ -	$ -	$ -	$ -	$ -
JR012020	Warwick Boulevard to James River Influent Force Main Section 3, Phase 2	$ -	$ -	$ -	$ -	$ -	$ -
JR012100	Huxley Place to Middle Ground Boulevard Force Main Extension	$ -	$ -	$ -	$ -	$ -	$ -
JR012200	Middle Ground Boulevard Off-Line Storage	$ -	$ -	$ -	$ 1,809	$ 3,337	$ 1,391
JR012300	Patrick Henry Off-Line Storage	$ 118	$ 634	$ 595	$ 3,965	$ 4,758	$ 1,190
JR012400	Center Avenue & Morrison Pump Station Capacity Improvements	$ 22	$ 264	$ 457	$ 720	$ 5,607	$ 5,612
JR012700	Triton Court Discharge Force Main	$ -	$ -	$ -	$ -	$ -	$ -
JR012800	James River Treatment Plant Hydraulic Improvements	$ -	$ -	$ -	$ -	$ -	$ -
JR012900	James River Treatment Plant Centrate Equalization Improvements	$ -	$ -	$ -	$ -	$ -	$ -
JR013000	Morrison Pump Station Discharge Force Main Replacement & Capacity Enhancements	$ -	$ -	$ -	$ -	$ -	$ -
JR013100	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase I	$ -	$ -	$ -	$ -	$ -	$ -
JR013200	Lucas Creek-Woodhaven Interceptor Force Main Replacement Phase II	$ 2,105	$ 882	$ -	$ -	$ -	$ -
	Subtotal	$ 6,116	$ 5,966	$ 1,274	$ 7,701	$ 18,069	$ 11,296
Middle Peninsula							
MP011100	Urbanna and Central Middlesex Treatment Plants Replacement and Expansion	$ 5,341	$ -	$ -	$ -	$ -	$ -
MP011200	Central Middlesex Collection System	$ 1,832	$ 1,832	$ 458	$ -	$ -	$ -
MP011400	Mathews Collection System Vacuum Valve Replacement	$ -	$ -	$ -	$ -	$ -	$ -
MP011700	Middle Peninsula Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	$ -	$ -	$ -	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2016 to FY-2025	FY16	FY17	FY18	FY19
MP011800	Kirby Street Sanitary Sewer Rehabilitation	$ 357	$ -	$ 46	$ 283	$ 28
MP011920	King William Treatment Plant Effluent Utilization	$ 1,053	$ 1,053	$ -	$ -	$ -
MP012000	King William Treatment Plant Improvements	$ 987	$ 364	$ 623	$ -	$ -
MP012100	West Point Treatment Plant Influent Gravity Line Replacement	$ 345	$ 345	$ -	$ -	$ -
MP012200	West Point Treatment Plant Chemical Building Replacement	$ 123	$ 123	$ -	$ -	$ -
MP012400	West Point Treatment Plant Tertiary Filter	$ 538	$ 87	$ 364	$ 87	$ -
MP012500	Mathews Main Vacuum Pump Station Replacement	$ 1,359	$ 23	$ 147	$ 787	$ 403
MP012600	Urbanna Treatment Plant Structural Modifications	$ 230	$ 230	$ -	$ -	$ -
MP012700	Middle Peninsula Sewer Lateral Improvements	$ 4,194	$ -	$ 898	$ 2,398	$ 898
	Subtotal	$ 33,273	$ 3,912	$ 4,509	$ 8,180	$ 7,209
Nansemond						
NP010610	Wilroy Interim Pressure Reducing Station	$ 2,561	$ -	$ 1,577	$ 985	$ -
NP010620	Suffolk Pump Station Replacement	$ 10,095	$ -	$ -	$ 435	$ 615
NP010630	Wilroy Pressure Reducing Station	$ 5,509	$ -	$ -	$ 7	$ 289
NP010800	Smithfield Pressure Reducing Station	$ 4,854	$ -	$ -	$ -	$ 84
NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replacement	$ 972	$ -	$ 642	$ 330	$ -
NP011800	Holland Road 24-Inch Interceptor Force Main – Section A	$ 19,482	$ 5,000	$ 8,059	$ 6,422	$ -
NP012000	Driver Pressure Reducing Station	$ 4,993	$ -	$ -	$ -	$ 39
NP012200	Pughsville Pressure Reducing Station Upgrades	$ 2,420	$ 700	$ 996	$ 725	$ -
NP012400	Western Branch Sewer System Gravity Improvements	$ 1,529	$ -	$ -	$ -	$ -
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	$ 7,545	$ -	$ 233	$ 317	$ 3,344
NP012600	Deep Creek Interceptor Force Main Replacement	$ 5,118	$ 146	$ 334	$ 2,636	$ 2,001
NP012700	Nansemond Treatment Plant AAA Tank Coating	$ 2,211	$ 982	$ 982	$ 246	$ -
NP012800	Nansemond Treatment Plant Primary Clarifier Drive Replacement	$ 163	$ 163	$ -	$ -	$ -
NP012900	Nansemond Treatment Plant Digester Rehabilitation	$ 916	$ 583	$ 333	$ -	$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	$ 1,900	$ 500	$ 400	$ 500	$ 500
	Subtotal	$ 70,267	$ 8,075	$ 13,557	$ 12,601	$ 6,872
Virginia Initiative Plant						
VP010600	North Trunk Sewer Section W 8-Inch and 12-Inch Force Mains and Larchmont Force Mains (Formerly Siphon Lines) Replacements	$ 2,257	$ -	$ -	$ -	$ -
VP010910	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 1 (Norfolk Fairmount Park Phase IX)	$ 1,788	$ 153	$ 139	$ 1,380	$ 115
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	$ 988	$ -	$ -	$ -	$ -
VP011020	Park Avenue Pump Station Replacement	$ 3,252	$ -	$ -	$ -	$ 24
VP011500	Sewerage System Improvements Division C, Phase I and Suction Lines Jefferson Street/Camden/Peachtree Portsmouth VA Replacements (I-264 Crossing)	$ 684	$ 684	$ -	$ -	$ -
VP011600	Sewerage System Improvements Division C, Phase II Replacement	$ 1,662	$ 152	$ 865	$ 645	$ -
VP012100	State Street Pump Station Electrical Modifications	$ 1,045	$ 1,045	$ -	$ -	$ -
VP012200	VIP Treatment Plant Concrete Repair and Coatings	$ 45	$ 45	$ -	$ -	$ -
VP013000	Norchester Street Pump Station Replacement/Rehabilitation	$ 2,410	$ 2,410	$ -	$ -	$ -
VP013200	South Trunk Sewer Section G 36-Inch and 30-Inch Force Main Replacement	$ 5,031	$ 1,807	$ 2,579	$ 645	$ -
VP014010	Ferebee Avenue Pump Station Replacement	$ 2,923	$ 41	$ 222	$ 1,122	$ 1,538
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	$ 4,513	$ 58	$ 320	$ 1,544	$ 2,591
VP014200	Colley Avenue Pump Station Rehabilitation	$ 1,258	$ 8	$ 53	$ 63	$ 568
VP014500	South Trunk Sewer Section Q 12-Inch Force Main Replacement	$ 2,376	$ -	$ -	$ -	$ -
VP014700	Ingleside Road Pump Station Replacement	$ 1,478	$ -	$ -	$ -	$ -
VP014800	Lee Avenue/Wesley Street Horizontal Valve Replacement	$ 1,047	$ -	$ -	$ -	$ -
VP015200	Camden Avenue Pump Station Replacement	$ 2,285	$ -	$ -	$ -	$ -
VP015300	Larchmont Area Pump Station Replacements	$ 8,386	$ -	$ -	$ 10	$ 207
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	$ 8,215	$ -	$ -	$ -	$ 165
VP015500	Norview Avenue Pump Station Replacement and Norview Connecting Sewer Replacement	$ 4,580	$ -	$ -	$ -	$ -
VP015800	Sanitary Sewer System Portsmouth VA Western Diversion Force Main Relocation (VDOT Turnpike Road Betterment)	$ 4,066	$ -	$ -	$ 4,066	$ -
VP016200	South Trunk Section G 30 and 24-Inch Force Main Replacement	$ 4,450	$ 1,566	$ 2,307	$ 577	$ -
VP016310	Virginia Initiative Plant Nutrient Reduction Improvements Contract A	$ 160	$ 160	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	FY20	FY21	FY22	FY23	FY24	FY25
MP011800	Kirby Street Sanitary Sewer Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
MP011920	King William Treatment Plant Effluent Utilization	$ -	$ -	$ -	$ -	$ -	$ -
MP012000	King William Treatment Plant Improvements	$ -	$ -	$ -	$ -	$ -	$ -
MP012100	West Point Treatment Plant Influent Gravity Line Replacement	$ -	$ -	$ -	$ -	$ -	$ -
MP012200	West Point Treatment Plant Chemical Building Replacement	$ -	$ -	$ -	$ -	$ -	$ -
MP012400	West Point Treatment Plant Tertiary Filter	$ -	$ -	$ -	$ -	$ -	$ -
MP012500	Mathews Main Vacuum Pump Station Replacement	$ -	$ -	$ -	$ -	$ -	$ -
MP012600	Urbanna Treatment Plant Structural Modifications	$ -	$ -	$ -	$ -	$ -	$ -
MP012700	Middle Peninsula Sewer Lateral Improvements	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 7,173	$ 1,832	$ 458	$ -	$ -	$ -
Nansemond							
NP010610	Wilroy Interim Pressure Reducing Station	$ -	$ -	$ -	$ -	$ -	$ -
NP010620	Suffolk Pump Station Replacement	$ 4,125	$ 4,920	$ -	$ -	$ -	$ -
NP010630	Wilroy Pressure Reducing Station	$ 2,031	$ 3,183	$ -	$ -	$ -	$ -
NP010800	Smithfield Pressure Reducing Station	$ 155	$ 942	$ 3,390	$ 282	$ -	$ -
NP011300	Suffolk Interceptor Force Main Section I Main Line Valving Replacement	$ -	$ -	$ -	$ -	$ -	$ -
NP011800	Holland Road 24-Inch Interceptor Force Main – Section A	$ -	$ -	$ -	$ -	$ -	$ -
NP012000	Driver Pressure Reducing Station	$ 92	$ 91	$ 91	$ 1,233	$ 2,433	$ 1,014
NP012200	Pughsville Pressure Reducing Station Upgrades	$ -	$ -	$ -	$ -	$ -	$ -
NP012400	Western Branch Sewer System Gravity Improvements	$ -	$ 8	$ 86	$ 82	$ 1,352	$ -
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	$ 3,651	$ -	$ -	$ -	$ -	$ -
NP012600	Deep Creek Interceptor Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
NP012700	Nansemond Treatment Plant AAA Tank Coating	$ -	$ -	$ -	$ -	$ -	$ -
NP012800	Nansemond Treatment Plant Primary Clarifier Drive Replacement	$ -	$ -	$ -	$ -	$ -	$ -
NP012900	Nansemond Treatment Plant Digester Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
NP013000	Nansemond Treatment Plant Motor Control Center Replacements	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 10,054	$ 9,145	$ 3,567	$ 1,597	$ 3,786	$ 1,014
Virginia Initiative Plant							
VP010600	North Trunk Sewer Section W 8-Inch and 12-Inch Force Mains and Larchmont Force Mains (Formerly Siphon Lines) Replacements	$ 15	$ 164	$ 1,633	$ 445	$ -	$ -
VP010910	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 1 (Norfolk Fairmount Park Phase IX)	$ -	$ -	$ -	$ -	$ -	$ -
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	$ 44	$ 50	$ 571	$ 323	$ -	$ -
VP011020	Park Avenue Pump Station Replacement	$ 46	$ 118	$ 471	$ 2,394	$ 200	$ -
VP011500	Sewerage System Improvements Division C, Phase I and Suction Lines Jefferson Street/Camden/Peachtree Portsmouth VA Replacements (I-264 Crossing)	$ -	$ -	$ -	$ -	$ -	$ -
VP011600	Sewerage System Improvements Division C, Phase II Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP012100	State Street Pump Station Electrical Modifications	$ -	$ -	$ -	$ -	$ -	$ -
VP012200	VIP Treatment Plant Concrete Repair and Coatings	$ -	$ -	$ -	$ -	$ -	$ -
VP013000	Norchester Street Pump Station Replacement/Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
VP013200	South Trunk Sewer Section G 36-Inch and 30-Inch Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP014010	Ferebee Avenue Pump Station Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP014200	Colley Avenue Pump Station Rehabilitation	$ 567	$ -	$ -	$ -	$ -	$ -
VP014500	South Trunk Sewer Section Q 12-Inch Force Main Replacement	$ -	$ 105	$ 109	$ 1,236	$ 926	$ -
VP014700	Ingleside Road Pump Station Replacement	$ 101	$ 423	$ 954	$ -	$ -	$ -
VP014800	Lee Avenue/Wesley Street Horizontal Valve Replacement	$ -	$ 327	$ 720	$ -	$ -	$ -
VP015200	Camden Avenue Pump Station Replacement	$ -	$ -	$ 93	$ 101	$ 1,438	$ 653
VP015300	Larchmont Area Pump Station Replacements	$ 529	$ 2,941	$ 3,524	$ 1,175	$ -	$ -
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	$ 579	$ 2,590	$ 3,445	$ 1,436	$ -	$ -
VP015500	Norview Avenue Pump Station Replacement and Norview Connecting Sewer Replacement	$ -	$ -	$ 173	$ 196	$ 2,377	$ 1,833
VP015800	Sanitary Sewer System Portsmouth VA Western Diversion Force Main Relocation (VDOT Turnpike Road Betterment)	$ -	$ -	$ -	$ -	$ -	$ -
VP016200	South Trunk Section G 30 and 24-Inch Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP016310	Virginia Initiative Plant Nutrient Reduction Improvements Contract A	$ -	$ -	$ -	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2016 to FY-2025	FY16	FY17	FY18	FY19
VP016320	Virginia Initiative Plant Nutrient Reduction Improvements Contract B	$ 79,573	$ 35,000	$ 22,822	$ 21,751	$ -
VP016400	Lafayette River Crossing / Norview – Estabrook Force Main Replacement	$ 127	$ 127	$ -	$ -	$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	$ 2,489	$ -	$ 17	$ 1,718	$ 754
VP016600	Norview-Estabrook Division I 16-Inch Force Main Replacement	$ 2,837	$ -	$ -	$ -	$ -
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	$ 2,098	$ -	$ 15	$ 168	$ 1,440
VP017000	Virginia Initiative Plant Incinerator Scrubber and ID Fans Replacement	$ 2,618	$ 2,618	$ -	$ -	$ -
VP017100	Central Norfolk Area Gravity Sewer Improvements	$ 2,129	$ -	$ -	$ -	$ 74
VP017200	Virginia Initiative Plant Primary Clarifiers Interior Concrete Repairs and Coatings	$ 350	$ 111	$ 191	$ 48	$ -
VP017300	Rodman Avenue Pump Station Wet Well Rehabilitation	$ 756	$ 467	$ 289	$ -	$ -
VP017400	Virginia Initiative Plant Diesel Engine Emergency Generator Replacement	$ 93	$ 93	$ -	$ -	$ -
VP017500	Effingham Street Interceptor Force Main Emergency Replacement	$ 1,797	$ 1,797	$ -	$ -	$ -
VP017600	Sewerage System Improvements Division C 36 Inch Replacement	$ 3,320	$ -	$ -	$ 116	$ 146
VP017700	Sewerage System Improvements Division C 42 Inch Replacement	$ 3,837	$ -	$ -	$ -	$ -
VP017800	Portsmouth Virginia Outlet Sewer Federal Housing Project Division A Phase I Replacement	$ 3,518	$ -	$ -	$ -	$ -
	Subtotal	$ 170,439	$ 48,342	$ 29,818	$ 33,853	$ 7,623
Williamsburg						
WB010300	Lee Hall Pump Station and Off-Line Storage Upgrades	$ 8,520	$ -	$ -	$ -	$ -
WB010700	Williamsburg Interceptor Force Main Contract A Replacement	$ 6,087	$ 2,526	$ 3,561	$ -	$ -
WB011520	Route 199 Pressure Reducing Station	$ 6,002	$ -	$ -	$ 36	$ 134
WB012200	North Trunk Force Main Part B Replacement	$ 570	$ 18	$ 23	$ 22	$ 307
WB012300	Williamsburg Pump Station Wet Well Rehabilitation	$ 237	$ 237	$ -	$ -	$ -
WB012400	Williamsburg Treatment Plant Switchgear Replacement	$ 4,206	$ 98	$ 804	$ 1,502	$ 1,802
WB012500	Lodge Road Pump Station Upgrades	$ 1,365	$ 49	$ 130	$ 813	$ 374
	Subtotal	$ 26,987	$ 2,929	$ 4,518	$ 2,372	$ 2,616
York River						
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	$ 2,807	$ -	$ -	$ -	$ -
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	$ 3,826	$ -	$ 53	$ 283	$ 1,082
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	$ 5,037	$ -	$ -	$ -	$ 23
YR010900	Tabb Pressure Reducing Station	$ 6,002	$ -	$ -	$ -	$ 28
YR011900	Bethel-Poquoson Force Main Part III Replacement	$ 1,137	$ 16	$ 59	$ 63	$ -
YR012200	York River Treatment Plant Digester Cover Replacement	$ 7	$ 7	$ -	$ -	$ -
YR012400	Langley Circle Pump Station Improvements	$ 557	$ -	$ -	$ -	$ -
YR012600	York River Treatment Plant Distributive Control System Upgrade	$ 4,179	$ -	$ -	$ -	$ -
YR013110	York River Treatment Plant Outfall and Diffuser Modifications	$ 11,314	$ 8,485	$ 2,828	$ -	$ -
YR013120	York River Treatment Plant Effluent Pump Station Improvements	$ 1,489	$ 1,489	$ -	$ -	$ -
YR013200	York River Treatment Plant Chemical Facility Improvements	$ 1,495	$ 1,495	$ -	$ -	$ -
YR013300	York River Treatment Plant Hypochlorite Tanks Replacement	$ 893	$ 893	$ -	$ -	$ -
	Subtotal	$ 38,742	$ 12,384	$ 2,940	$ 346	$ 1,133
General						
GN010730	Horizontal Valve Replacement Phase III	$ 2,967	$ -	$ -	$ -	$ -
GN011700	Pump Station Generators	$ 5,878	$ 614	$ 405	$ 2,429	$ 2,429
GN012110	Regional Hydraulic Model and Other Consent Order Requirements	$ 33,280	$ 9,500	$ 7,960	$ 6,630	$ 4,570
GN012120	Private Property Inflow and Infiltration Program	$ 132,944	$ -	$ -	$ -	$ -
GN012130	Manhole Rehabilitation/Replacement Phase I and North Shore Siphon Chamber Rehabilitation Phase I	$ 2,134	$ 13	$ 927	$ 1,193	$ -
GN012140	Pump Station Wet Well Rehabilitation Phase I	$ 2,516	$ -	$ 519	$ 1,498	$ 499
GN012150	Locality System Monitoring and Condition Assessment	$ 2,000	$ 2,000	$ -	$ -	$ -
GN012800	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	$ 19,823	$ 7,550	$ 9,924	$ 2,349	$ -
GN013200	Arc Flash Electrical Equipment Improvements	$ 5,652	$ 647	$ 630	$ 640	$ 646
GN013300	Treatment Plant Grease Handling Facilities	$ 1,311	$ 430	$ 882	$ -	$ -
GN013600	North Shore Pump Station Wet Well Rehabilitation	$ 622	$ 622	$ -	$ -	$ -
GN013800	North Shore Odor Control and Chemical Injection Study	$ 284	$ 284	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	FY20	FY21	FY22	FY23	FY24	FY25
VP016320	Virginia Initiative Plant Nutrient Reduction Improvements Contract B	$ -	$ -	$ -	$ -	$ -	$ -
VP016400	Lafayette River Crossing / Norview – Estabrook Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP016600	Norview-Estabrook Division I 16-Inch Force Main Replacement	$ -	$ 147	$ 455	$ 2,064	$ 172	$ -
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	$ 474	$ -	$ -	$ -	$ -	$ -
VP017000	Virginia Initiative Plant Incinerator Scrubber and ID Fans Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP017100	Central Norfolk Area Gravity Sewer Improvements	$ 124	$ 838	$ 1,092	$ -	$ -	$ -
VP017200	Virginia Initiative Plant Primary Clarifiers Interior Concrete Repairs and Coatings	$ -	$ -	$ -	$ -	$ -	$ -
VP017300	Rodman Avenue Pump Station Wet Well Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
VP017400	Virginia Initiative Plant Diesel Engine Emergency Generator Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP017500	Effingham Street Interceptor Force Main Emergency Replacement	$ -	$ -	$ -	$ -	$ -	$ -
VP017600	Sewerage System Improvements Division C 36 Inch Replacement	$ 771	$ 2,111	$ 176	$ -	$ -	$ -
VP017700	Sewerage System Improvements Division C 42 Inch Replacement	$ 140	$ 225	$ 2,238	$ 1,234	$ -	$ -
VP017800	Portsmouth Virginia Outlet Sewer Federal Housing Project Division A Phase I Replacement	$ -	$ -	$ 183	$ 167	$ 2,715	$ 453
	Subtotal	$ 3,391	$ 10,037	$ 15,837	$ 10,771	$ 7,828	$ 2,939
Williamsburg							
WB010300	Lee Hall Pump Station and Off-Line Storage Upgrades	$ -	$ 643	$ 853	$ 3,512	$ 3,512	$ -
WB010700	Williamsburg Interceptor Force Main Contract A Replacement	$ -	$ -	$ -	$ -	$ -	$ -
WB011520	Route 199 Pressure Reducing Station	$ 376	$ 2,091	$ 2,376	$ 990	$ -	$ -
WB012200	North Trunk Force Main Part B Replacement	$ 200	$ -	$ -	$ -	$ -	$ -
WB012300	Williamsburg Pump Station Wet Well Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
WB012400	Williamsburg Treatment Plant Switchgear Replacement	$ -	$ -	$ -	$ -	$ -	$ -
WB012500	Lodge Road Pump Station Upgrades	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 576	$ 2,734	$ 3,229	$ 4,501	$ 3,512	$ -
York River							
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	$ 173	$ 1,206	$ 1,429	$ -	$ -	$ -
YR010520	Magruder Mercury Interceptor Force Main Replacement - Section B	$ 2,409	$ -	$ -	$ -	$ -	$ -
YR010530	Magruder Mercury Interceptor Force Main Replacement - Section C	$ 134	$ 385	$ 1,799	$ 2,156	$ 539	$ -
YR010900	Tabb Pressure Reducing Station	$ 71	$ 446	$ 2,515	$ 2,941	$ -	$ -
YR011900	Bethel-Poquoson Force Main Part III Replacement	$ 70	$ 279	$ 279	$ 279	$ 93	$ -
YR012200	York River Treatment Plant Digester Cover Replacement	$ -	$ -	$ -	$ -	$ -	$ -
YR012400	Langley Circle Pump Station Improvements	$ -	$ -	$ 16	$ 432	$ 110	$ -
YR012600	York River Treatment Plant Distributive Control System Upgrade	$ -	$ -	$ 355	$ 1,532	$ 2,257	$ 35
YR013110	York River Treatment Plant Outfall and Diffuser Modifications	$ -	$ -	$ -	$ -	$ -	$ -
YR013120	York River Treatment Plant Effluent Pump Station Improvements	$ -	$ -	$ -	$ -	$ -	$ -
YR013200	York River Treatment Plant Chemical Facility Improvements	$ -	$ -	$ -	$ -	$ -	$ -
YR013300	York River Treatment Plant Hypochlorite Tanks Replacement	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 2,857	$ 2,315	$ 6,393	$ 7,340	$ 2,998	$ 35
General							
GN010730	Horizontal Valve Replacement Phase III	$ -	$ 922	$ 2,046	$ -	$ -	$ -
GN011700	Pump Station Generators	$ -	$ -	$ -	$ -	$ -	$ -
GN012110	Regional Hydraulic Model and Other Consent Order Requirements	$ 4,620	$ -	$ -	$ -	$ -	$ -
GN012120	Private Property Inflow and Infiltration Program	$ 2,761	$ 4,266	$ 5,858	$ 8,485	$ 8,740	$ 9,002
GN012130	Manhole Rehabilitation/Replacement Phase I and North Shore Siphon Chamber Rehabilitation Phase I	$ -	$ -	$ -	$ -	$ -	$ -
GN012140	Pump Station Wet Well Rehabilitation Phase I	$ -	$ -	$ -	$ -	$ -	$ -
GN012150	Locality System Monitoring and Condition Assessment	$ -	$ -	$ -	$ -	$ -	$ -
GN012800	Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements	$ -	$ -	$ -	$ -	$ -	$ -
GN013200	Arc Flash Electrical Equipment Improvements	$ 639	$ 630	$ 640	$ 590	$ 590	$ -
GN013300	Treatment Plant Grease Handling Facilities	$ -	$ -	$ -	$ -	$ -	$ -
GN013600	North Shore Pump Station Wet Well Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
GN013800	North Shore Odor Control and Chemical Injection Study	$ -	$ -	$ -	$ -	$ -	$ -

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	Total FY-2016 to FY-2025	FY16	FY17	FY18	FY19
GN013900	South Shore Interceptors Air Vent Rehabilitation	$ 2,542	$ 1,017	$ 1,017	$ 508	$ -
GN014300	North Shore Operations Unvented High Spot Correction	$ 903	$ 452	$ 452	$ -	$ -
GN014400	Pump Station & Plant Roof Replacement	$ 453	$ -	$ 260	$ 193	$ -
GN014500	Renewable Energy Facility and Associated Plant Improvements	$ 174,076	$ -	$ -	$ -	$ -
GN014900	North Shore Gravity Sewer Improvements Phase I	$ 3,002	$ -	$ -	$ -	$ 43
GN015000	South Shore Gravity Sewer Improvements Phase I	$ 631	$ -	$ -	$ -	$ -
GN015100	Arctic Avenue Pump Station and Newtown Road Pump Station Electrical Improvements	$ 508	$ 42	$ 172	$ 294	$ -
GN015300	Interceptor System Valve Improvements Phase I	$ 2,405	$ -	$ -	$ -	$ 55
GN015400	South Shore Aerial Crossing Improvements	$ 242	$ -	$ -	$ -	$ -
GN015700	Aquifer Replenishment System Concept Feasibility Evaluation	$ 169	$ 169	$ -	$ -	$ -
GN015800	North Shore Automated Diversion Facilities	$ 1,397	$ 49	$ 107	$ 1,241	$ -
	Subtotal	$ 129,813	$ 23,387	$ 23,254	$ 16,976	$ 8,242
Future Improvements						
IP010000	Interceptor System Expansions and Improvements	$ 20,115	$ -	$ -	$ -	$ -
IP010100	Pump Station Expansions and Improvements	$ 3,718	$ -	$ -	$ -	$ -
IP010200	Treatment Plant Expansions and Improvements	$ 13,187	$ -	$ -	$ -	$ -
IP010300	General Expansions and Improvements	$ 3,768	$ -	$ -	$ -	$ -
IP010400	Interceptor System Rehabilitation and Replacement	$ 20,115	$ -	$ -	$ -	$ -
IP010500	Pump Station Rehabilitation and Replacement	$ 3,718	$ -	$ -	$ -	$ -
IP010600	Treatment Plant Rehabilitation and Replacement	$ 13,187	$ -	$ -	$ -	$ -
IP010700	General Rehabilitation and Replacement	$ 3,768	$ -	$ -	$ -	$ -
IP010800	Regional Wet Weather Improvements	$ 14,426	$ -	$ -	$ -	$ -
IP010900	Locality Rehab and Upstream Capacity Improvements	$ 404,510	$ -	$ -	$ -	$ 13,402
	Subtotal	$ 500,512	$ -	$ -	$ -	$ 13,402
	CIP TOTALS	$ 1,389,315	$ 155,000	$ 117,647	$ 114,286	$ 119,048

FY-2016 TO FY-2025
Cash Flow Projections (in thousands)

CIP No	Project Name	FY20	FY21	FY22	FY23	FY24	FY25
GN013900	South Shore Interceptors Air Vent Rehabilitation	$ -	$ -	$ -	$ -	$ -	$ -
GN014300	North Shore Operations Unvented High Spot Correction	$ -	$ -	$ -	$ -	$ -	$ -
GN014400	Pump Station & Plant Roof Replacement	$ -	$ -	$ -	$ -	$ -	$ -
GN014500	Renewable Energy Facility and Associated Plant Improvements	$ -	$ -	$ -	$ -	$ -	$ 1,985
GN014900	North Shore Gravity Sewer Improvements Phase I	$ 168	$ 150	$ 1,500	$ 1,141	$ -	$ -
GN015000	South Shore Gravity Sewer Improvements Phase I	$ -	$ 28	$ 81	$ 154	$ 369	$ -
GN015100	Arctic Avenue Pump Station and Newtown Road Pump Station Electrical Improvements	$ -	$ -	$ -	$ -	$ -	$ -
GN015300	Interceptor System Valve Improvements Phase I	$ 148	$ 405	$ 1,268	$ 528	$ -	$ -
GN015400	South Shore Aerial Crossing Improvements	$ 3	$ 14	$ 10	$ 110	$ 105	$ -
GN015700	Aquifer Replenishment System Concept Feasibility Evaluation	$ -	$ -	$ -	$ -	$ -	$ -
GN015800	North Shore Automated Diversion Facilities	$ -	$ -	$ -	$ -	$ -	$ -
	Subtotal	$ 8,339	$ 6,414	$ 11,402	$ 11,009	$ 9,804	$ 10,987
Future Improvements							
IP010000	Interceptor System Expansions and Improvements	$ 919	$ 744	$ 901	$ 2,332	$ 4,478	$ 10,741
IP010100	Pump Station Expansions and Improvements	$ 130	$ 142	$ 172	$ 421	$ 842	$ 2,012
IP010200	Treatment Plant Expansions and Improvements	$ 1,274	$ 564	$ 683	$ 2,055	$ 3,537	$ 5,076
IP010300	General Expansions and Improvements	$ 364	$ 161	$ 195	$ 587	$ 1,011	$ 1,450
IP010400	Interceptor System Rehabilitation and Replacement	$ 919	$ 744	$ 901	$ 2,332	$ 4,478	$ 10,741
IP010500	Pump Station Rehabilitation and Replacement	$ 130	$ 142	$ 172	$ 421	$ 842	$ 2,012
IP010600	Treatment Plant Rehabilitation and Replacement	$ 1,274	$ 564	$ 683	$ 2,055	$ 3,537	$ 5,076
IP010700	General Rehabilitation and Replacement	$ 364	$ 161	$ 195	$ 587	$ 1,011	$ 1,450
IP010800	Regional Wet Weather Improvements	$ -	$ -	$ -	$ -	$ 4,714	$ 9,712
IP010900	Locality Rehab and Upstream Capacity Improvements	$ 27,609	$ 42,656	$ 58,580	$ 84,850	$ 87,395	$ 90,017
	Subtotal	$ 32,981	$ 45,876	$ 62,481	$ 95,641	$ 111,845	$ 138,285
	CIP TOTALS	$ 136,667	$ 126,667	$ 122,858	$ 149,524	$ 173,810	$ 173,810

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Foresighted citizens of the region, on November 5, 1940, passed the referendum that established the Hampton Roads Sanitation District. As we prepare to commemorate the 75th anniversary of our creation, HRSD is paying tribute to those with the conviction to vote to eliminate sewage pollution in the tidal waters of the Chesapeake Bay by publishing the history of their legacy. The images featured on the cover and dividers of this budget tell an important part of that story–the construction and upgrade of HRSD facilities over the decades. To read more about HRSD and our infrastructure, visit www.hrsd.com and learn how we are Living the Legacy.

PHOTO CAPTIONS

FRONT COVER: The Lamberts Point Plant outfall was constructed in 1946.

INTRODUCTION: Workers place steel in a digester under construction at the Boat Harbor Plant in 1959.

FINANCIAL FORECAST: The HRSD network, which included 42 pump stations in 1966, continued to grow with the addition of facilities such as the Newtown Pump Station, shown under construction in 1968.

OPERATING BUDGET: The docked SS United States can be seen through rebar work during construction of aeration basins at the Army Base Plant in 1978.

CAPITAL BUDGET: The diffuser for the Nansemond Plant was assembled in 1982.

HRSD

Cleaning wastewater every day for a better Bay.

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