RATINGS: Standard & Poor's: "AA" Fitch: "AA"

In the opinion of Bond Counsel, assuming compliance with the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), as described herein, and subject to the conditions described in "TAX MATTERS" herein, interest on the Series 2016A Bonds will not be includable in the gross income of the owners thereof for federal income tax purposes under existing law. Interest on the Series 2016A Bonds will not be a specific preference item for purposes of calculating the federal alternative minimum taxable income of individuals or corporations but will be included in the calculation of a corporation's federal alternative minimum tax liability. The District's Enabling Act provides that the Series 2016A Bonds, their transfer and the income therefrom, including any profit made on the sale thereof, shall be exempt from taxation by the Commonwealth of Virginia and by any political subdivision thereof. See "TAX MATTERS" herein for certain provisions regarding the Code that may affect the tax treatment of interest on the Series 2016A Bonds for certain bondholders.



#### \$246,845,000

# Hampton Roads Sanitation District, Virginia Subordinate Wastewater Revenue Bonds, Series 2016A

Dated: Date of Issue Due: As shown on the inside cover

The Series 2016A Bonds are being issued under an Amended and Restated Trust Agreement, dated as of March 1, 2016, as amended and supplemented (the "Trust Agreement"), between the Hampton Roads Sanitation District (the "District") and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). The proceeds of the Series 2016A Bonds will be used, together with other available funds of the District, (i) to finance a portion of the cost of the District's Capital Improvement Program (as defined herein), (ii) to refinance outstanding advances received by the District under the District's Credit Agreement (as defined herein), (iii) to refund a portion of the District's Outstanding Senior Bonds (as defined herein), and (iv) to pay certain costs of issuing the Series 2016A Bonds.

The Series 2016A Bonds are issuable as registered bonds without coupons and will be initially registered only in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), serving as securities depository for the Series 2016A Bonds. The Series 2016A Bonds will be available to purchasers in denominations of \$5,000 and any whole multiple thereof only under the book-entry system maintained by DTC through brokers and dealers that are, or that act through, DTC Participants.

Principal and interest will be paid by the Trustee as bond registrar to DTC or its nominee, which will remit the payments to the DTC Participants for subsequent disbursement. See "THE SERIES 2016A BONDS—Book-Entry Only System" herein. Interest on the Series 2016A Bonds is payable on each February 1 and August 1, commencing August 1, 2016.

The Series 2016A Bonds are subject to optional and mandatory redemption prior to maturity as described herein.

Each initial purchaser of the Series 2016A Bonds will, by accepting delivery of such Series 2016A Bonds, be deemed to have consented to certain amendments to the Trust Agreement. See "SECURITY AND SOURCES OF PAYMENT—Trust Agreement Amendments" herein.

THE SERIES 2016A BONDS ARE SPECIAL OBLIGATIONS OF THE DISTRICT PAYABLE SOLELY FROM THE NET REVENUES AVAILABLE FOR DEBT SERVICE AND OTHER FUNDS PLEDGED TO SECURE THE SERIES 2016A BONDS UNDER THE TRUST AGREEMENT. THE SERIES 2016A BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT, OR A PLEDGE OF THE FAITH AND CREDIT, OF THE COMMONWEALTH OF VIRGINIA OR OF ANY COUNTY, CITY, TOWN OR POLITICAL SUBDIVISION THEREOF. THE ISSUANCE OF THE SERIES 2016A BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE COMMONWEALTH OF VIRGINIA OR ANY COUNTY, CITY, TOWN OR POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION WHATEVER THEREFOR.

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential to making an informed investment decision.

The Series 2016A Bonds are offered when, as and if issued, subject to the approving opinion of Sidley Austin LLP, Washington, D.C., Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the District by Kellam, Pickrell, Cox, Tayloe & Anderson, a Professional Corporation, Norfolk, Virginia, and for the Underwriters by Kaufman & Canoles, P.C., Norfolk, Virginia. The Series 2016A Bonds are expected be available for delivery to The Depository Trust Company in New York, New York, on or about March 17, 2016.

**BofA Merrill Lynch** 

J.P. Morgan Morgan Stanley RBC Capital Markets

# \$246,845,000 Hampton Roads Sanitation District, Virginia Subordinate Wastewater Revenue Bonds, Series 2016A

# MATURITIES, AMOUNTS, INTEREST RATES AND PRICES OR YIELDS Base CUSIP Number: 409327

| Due<br>August_1 | Principal<br><u>Amount</u> | Interest<br><u>Rate</u> | <b>Yield</b> | CUSIP<br>Suffix* |
|-----------------|----------------------------|-------------------------|--------------|------------------|
| 2016            | \$ 3,525,000               | 2.00%                   | 0.20%        | GU1              |
| 2017            | 2,400,000                  | 5.00                    | 0.48         | GV9              |
| 2018            | 2,520,000                  | 5.00                    | 0.62         | GW7              |
| 2019            | 2,650,000                  | 5.00                    | 0.74         | GX5              |
| 2020            | 4,160,000                  | 5.00                    | 0.86         | GY3              |
| 2021            | 5,875,000                  | 5.00                    | 1.00         | GZ0              |
| 2022            | 3,080,000                  | 5.00                    | 1.19         | HA4              |
| 2023            | 3,235,000                  | 5.00                    | 1.39         | HB2              |
| 2024            | 3,405,000                  | 5.00                    | 1.59         | HC0              |
| 2025            | 3,120,000                  | 4.00                    | 1.75         | HU0              |
| 2025            | 865,000                    | 5.00                    | 1.75         | HD8              |
| 2026            | 9,640,000                  | 4.00                    | 1.90         | HV8              |
| 2027            | 10,080,000                 | 5.00                    | 2.05†        | HE6              |
| 2028            | 6,125,000                  | 5.00                    | 2.18†        | HF3              |
| 2029            | 6,435,000                  | 5.00                    | 2.28†        | HG1              |
| 2030            | 17,825,000                 | 5.00                    | 2.38†        | HH9              |
| 2031            | 18,735,000                 | 5.00                    | 2.47†        | HJ5              |
| 2032            | 14,630,000                 | 4.00                    | 2.86†        | HW6              |
| 2032            | 4,990,000                  | 5.00                    | 2.56†        | HK2              |
| 2033            | 20,550,000                 | 5.00                    | 2.61†        | HL0              |
| 2034            | 21,085,000                 | 5.00                    | 2.66†        | HM8              |
| 2035            | 13,460,000                 | 3.00                    | 3.11         | HS5              |
| 2035            | 2,480,000                  | 5.00                    | 2.71†        | HN6              |
| 2036            | 20,115,000                 | 3.00                    | 3.16         | HT3              |
| 2036            | 2,590,000                  | 5.00                    | 2.76†        | HP1              |
| 2037            | 17,020,000                 | 5.00                    | 2.81†        | HQ9              |

\$26,250,000 5.00% Term Bonds due August 1, 2043, Priced to Yield 3.02%†, CUSIP Suffix\* HR7

\* CUSIP® is a registered trademark of the American Bankers Association. The CUSIP numbers listed above are being provided solely for the convenience of bondholders only, and the District does not make any representation with respect to such numbers or undertake any responsibility for their accuracy. The CUSIP numbers are subject to being changed after the issuance of the Series 2016A Bonds.

\_

<sup>†</sup> Priced at the stated yield to the August 1, 2026 optional redemption date.



#### HAMPTON ROADS SANITATION DISTRICT

#### **COMMISSIONERS**

VISHNU K. LAKDAWALA, Ph.D., Chairman

FREDERICK N. ELOFSON, CPA, Vice Chairman

ARTHUR C. BREDEMEYER WILLIE LEVENSTON, JR. STEPHEN C. RODRIGUEZ MICHAEL E. GLENN MAURICE P. LYNCH, Ph.D. SUSAN M. ROTKIS

#### **STAFF**

EDWARD G. HENIFIN, P.E. *General Manager* 

DONALD C. CORRADO Director of Information Technology JAY A. BERNAS, P.E. Director of Finance and Treasurer

PHILLIP L. HUBBARD, P.E. Special Assistant for Compliance Assurance

BRUCE W. HUSSELBEE, P.E. Director of Engineering

JAMES J. PLETL, Ph.D. Director of Water Quality

STEVEN G. de MIK, CPA Director of Operations

PAULA A. HOGG

Director of Talent Management

CHARLES B. BOTT, PhD. P.E. Director of Water Technology and Research

JENNIFER L. CASCIO Secretary

#### COUNSEL, ADVISOR, TRUSTEE

KELLAM, PICKRELL, COX, TAYLOE & ANDERSON, A PROFESSIONAL CORPORATION General Counsel

> JONES, BLECHMAN, WOLTZ & KELLY, P.C. Associate Counsel

PUBLIC FINANCIAL MANAGEMENT, INC.

Financial Advisor

SIDLEY AUSTIN LLP Bond Counsel

AQUALAW, PLC Special Counsel

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.

Trustee and Bond Registrar

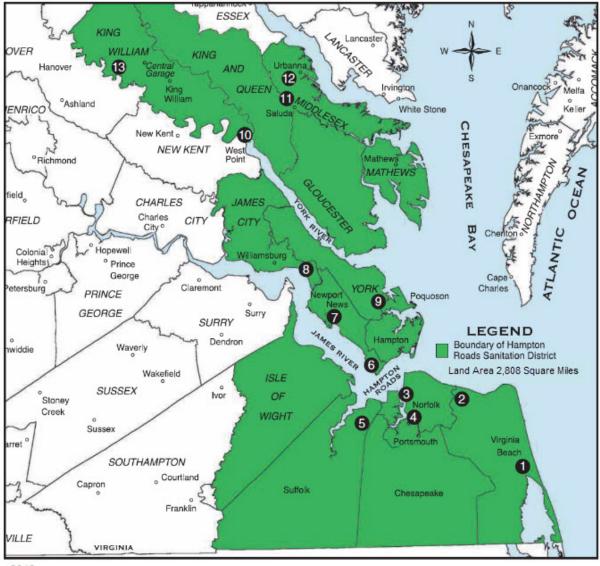
# **HRSD**

### 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



2016

CERTAIN STATEMENTS INCLUDED IN THIS OFFICIAL STATEMENT CONSTITUTE "FORWARD-LOOKING STATEMENTS" WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933, AS AMENDED, AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS ARE GENERALLY IDENTIFIABLE BY TERMS SUCH AS "PLAN," "PROJECT," "EXPECT," "ANTICIPATE," "INTEND," "BELIEVE," "ESTIMATE," "BUDGET" OR OTHER SIMILAR WORDS. THE ACHIEVEMENT OF CERTAIN RESULTS OR OTHER EXPECTATIONS CONTAINED IN SUCH FORWARD-LOOKING STATEMENTS INVOLVES KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS DESCRIBED TO BE MATERIALLY DIFFERENT FROM ANY RESULTS, PERFORMANCES OR ACHIEVEMENTS EXPRESS OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. EXCEPT AS SPECIFICALLY SET FORTH HEREIN, THE DISTRICT DOES NOT PLAN TO ISSUE ANY UPDATES OR REVISIONS TO THOSE FORWARD-LOOKING STATEMENTS DUE TO CHANGES IN ITS EXPECTATIONS OR SUBSEQUENT EVENTS, CONDITIONS OR CIRCUMSTANCES ON WHICH SUCH STATEMENTS ARE BASED.

This Official Statement speaks as of its date except where specifically noted otherwise and is subject to change without notice. Neither the delivery of this Official Statement, any sale made hereunder, nor any filing of this Official Statement shall under any circumstances create an implication that there has been no change in the affairs of the District since the date of this Official Statement or imply that any information herein is accurate or complete as of any later date.

The Series 2016A Bonds are exempt from registration under the Securities Act of 1933, as amended. As obligations of a political subdivision of the Commonwealth of Virginia, the Series 2016A Bonds are also exempt from registration under the securities laws of Virginia.

No dealer, salesman or any other person who has been authorized to give any information or to make any representation, other than the information and representations contained herein, in connection with the offering of the Series 2016A Bonds, and, if given or made, such information or representations must not be relied upon. This Official Statement does not constitute an offer to sell or solicitation of an offer to buy any of the Series 2016A Bonds in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibility to investors under the federal securities laws as applied to the facts and circumstances of the transactions contemplated by this Official Statement, but the Underwriters do not guarantee the accuracy or completeness of such information.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2016A BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

# TABLE OF CONTENTS

|   | Page |
|---|------|
| INTRODUCTION  | 1    |
| PLAN OF FINANCING   | 2    |
| Capital Improvements  |      |
| Plan of Refinancing   |      |
| Plan of Refunding   | 2    |
| Series 2016B Bonds  | 4    |
| Future Financings   | 4    |
| SOURCES AND USES OF FUNDS                                       | 5    |
| THE SERIES 2016A BONDS  | 5    |
| Description   | 5    |
| Book-Entry Only System  |      |
| Redemption Provisions   |      |
| Notice of Redemption  | 6    |
| SECURITY AND SOURCES OF PAYMENT                                 | 7    |
| General   |      |
| Rate Covenant   | 8    |
| Outstanding Senior Obligations                                  | 8    |
| Additional Senior Obligations                                   |      |
| Parity Obligations  | 9    |
| Additional Parity Obligations                                   |      |
| Trust Agreement Amendments                                      |      |
| Amendments relating to VRA Obligations                          | 10   |
| DEBT SERVICE REQUIREMENTS FOR PARITY OBLIGATIONS                | 12   |
| DEBT SERVICE REQUIREMENTS FOR SENIOR OBLIGATIONS AND PARITY     |      |
| OBLIGATIONS   | 13   |
| HAMPTON ROADS SANITATION DISTRICT                               | 14   |
| Authorization and Purpose                                       |      |
| History   |      |
| The Commission  |      |
| Management and Staff  |      |
| Awards  |      |
| THE SERVICE AREA  | 24   |
| Population Growth   | 24   |
| Wastewater Flow   | 26   |
| Expansion of Service Area                                       | 26   |
| THE SYSTEM  | 26   |
| System Improvements and Innovations                             |      |
| Capital Improvement Program                                     |      |
| Regulation and Permits  |      |
| State Consent Agreement, EPA Consent Decree and Regionalization | 30   |

| FINANCIAL I  | MANAGEMENT   | 32 |
|--------------|--|----|
| Genera       | al   | 32 |
| Budge        | ting and Accounting  | 35 |
|              |  |    |
| Rate N       | Making Process   | 36 |
| Collec       | tion of Unpaid Wastewater Treatment Charges  | 37 |
| LITIGATION   |  | 38 |
| APPROVAL (   | OF LEGAL PROCEEDINGS   | 38 |
| TAX MATTE    | RS   | 38 |
|              | al   |    |
| _            | al Issue Discount  |    |
|              | al Issue Premium   |    |
|              | p Withholding  |    |
|              | eral Tax Consequences  |    |
| -            | ia Taxes   |    |
| Future       | Developments   | 40 |
| UNDERWRIT    | 'ING   | 41 |
| FINANCIAL A  | ADVISOR  | 42 |
| VERIFICATIO  | ON OF MATHEMATICAL COMPUTATIONS FOR THE REFUNDED BONDS   | 42 |
| RATINGS      |  | 42 |
| CONTINUINO   | G DISCLOSURE   | 42 |
| MISCELLAN    | EOUS   | 44 |
| Appendix A - | Comprehensive Annual Financial Report for the Fiscal Year ended June 30 including as a part thereof, the Basic Financial Statements and Related Auditor's for the Fiscal Year ended June 30, 2015, as rendered by KPMG LLP |    |
| Appendix B - | Certain Definitions  |    |
| Appendix C - | Summary of Certain Provisions of the Trust Agreement   |    |
| Appendix D - | Proposed Opinion of Bond Counsel   |    |
| Appendix E - | Form of Continuing Disclosure Agreement  |    |
| Appendix F - | The Depository Trust Company   |    |

#### **Official Statement**

# **Hampton Roads Sanitation District, Virginia**

# Relating to its \$246,845,000 Subordinate Wastewater Revenue Bonds, Series 2016A

#### INTRODUCTION

This Official Statement, which includes the cover and inside cover pages hereof, the map and the appendices hereto, sets forth information concerning the Hampton Roads Sanitation District (the "District" or "HRSD") and the District's \$246,845,000 aggregate principal amount of Subordinate Wastewater Revenue Bonds, Series 2016A (the "Series 2016A Bonds").

The Series 2016A Bonds are being issued in accordance with the provisions of Chapter 66 of the Acts of Assembly of Virginia of 1960, as amended (the "Enabling Act"). On January 26, 2016, the Hampton Roads Sanitation District Commission (the "Commission"), the governing body of the District, authorized by resolution the issuance of the Series 2016A Bonds. The Commission is issuing the Series 2016A Bonds for the purpose of providing funds, together with other available funds, (i) to finance a portion of the costs of the District's Capital Improvement Program (as amended from time to time, the "Capital Improvement Program" or "CIP"), (ii) to refinance outstanding advances received by the District under the District's Credit Agreement (as hereinafter defined), (iii) to refund, in advance of their maturity, certain Outstanding Senior Bonds (the "Refunding Candidates") and (iv) to pay certain expenses incurred in connection with the issuance of the Series 2016A Bonds by the District.

The Series 2016A Bonds are special obligations of the District payable solely from the Net Revenues Available for Debt Service (hereinafter defined) derived by the District from the operation of its Wastewater System (hereinafter defined) and other funds pledged to secure the Series 2016A Bonds under the Trust Agreement (hereinafter defined). See "SECURITY AND SOURCES OF PAYMENT" and "THE SYSTEM" herein. The Commission has determined to provide for the issuance of the Series 2016A Bonds under the Amended and Restated Trust Agreement, dated as of March 1, 2016 (the "Amended and Restated Trust Agreement"), as supplemented by the Third Supplemental Trust Agreement, dated as of March 1, 2016 (the "Third Supplemental Trust Agreement" and the Amended and Restated Trust Agreement, as so supplemented and as the same may be amended and further supplemented, the "Trust Agreement"), each by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee (in such capacity, the "Trustee").

The Amended and Restated Trust Agreement amends and restates the Trust Agreement, dated as of October 1, 2011, between the District and the Trustee (the "Original Trust Agreement"), and will become effective on the date of delivery of the Series 2016A Bonds. EACH INITIAL PURCHASER OF THE SERIES 2016A BONDS WILL, BY ACCEPTING DELIVERY OF SUCH SERIES 2016A BONDS, BE DEEMED TO HAVE EXPRESSLY CONSENTED TO THE EXECUTION AND DELIVERY OF THE AMENDED AND RESTATED TRUST AGREEMENT. See "SECURITY AND SOURCES OF PAYMENT—Trust Agreement Amendments" herein.

On or about April 1, 2016, the District expects to issue approximately \$50,000,000 Variable Rate Subordinate Wastewater Revenue Bonds, Series 2016B (the "Series 2016B Bonds"). The Series 2016B Bonds will constitute "Parity Obligations" under the Trust Agreement, secured on a parity with Bonds

issued under the Trust Agreement and VRA Subordinate Obligations (each as defined below), but are secured by a lien on Net Revenues of the District that is, in all respects subordinate and inferior to the lien thereon of Senior Obligations, outstanding under the Senior Trust Agreement (each as defined below). Proceeds of the Series 2016B Bonds will (i) provide additional funds for the costs of the District's Capital Improvement Program, (ii) refund the District's outstanding Variable Rate Subordinate Wastewater Revenue Bonds, Series 2011 (the "Subordinate 2011 Bonds"), and (iii) pay certain expenses incurred in connection with the issuance thereof. The issuance of the Series 2016B Bonds is not contingent upon the issuance of the Series 2016A Bonds. The Series 2016B Bonds are offered by means of a separate official statement. See "PLAN OF FINANCING – Series 2016B Bonds."

This Official Statement contains a brief description of the Series 2016A Bonds and the District, including its service area, governance and information regarding its operations and finances.

Appendix A contains the District's Comprehensive Annual Financial Report for the Fiscal Year ended June 30, 2015, and includes additional information regarding the District's operations and financial condition. Appendix B contains the definitions of certain terms used in this Official Statement. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Trust Agreement. Brief descriptions and summaries of certain provisions of the Series 2016A Bonds, the Trust Agreement and the Third Supplemental Trust Agreement are included in Appendix C.

#### PLAN OF FINANCING

#### **Capital Improvements**

A portion of the proceeds of the Series 2016A Bonds will be applied to finance a portion of the costs of the District's Capital Improvement Program. See "THE SYSTEM—Capital Improvement Program."

# **Plan of Refinancing**

The District has entered into a Credit Agreement, dated as of October 30, 2015, with Bank of America, N.A. (the "Credit Agreement") pursuant to which the bank has provided a line of credit in the aggregate principal amount of up to \$90,000,000 (the "Line of Credit"). The District has received advances under the Line of Credit in the aggregate amount of approximately \$56.1 million (the "Outstanding Advances"). The Outstanding Advances financed certain costs of the District's Capital Improvement Program.

The District anticipates refinancing the Outstanding Advances with a portion of the proceeds of the Series 2016A Bonds.

#### **Plan of Refunding**

A portion of the proceeds of the Series 2016A Bonds will be applied to refund the Refunded Bonds. The District has determined that refunding the Refunded Bonds will produce debt service savings for the District. The Refunded Bonds are set forth below:

#### Wastewater Revenue Bonds, Series 2008

| Maturity<br>(April 1) | Principal<br><u>Amount</u> | Redemption Date | Redemption<br><u>Price</u> | <u>CUSIPs</u> |
|-----------------------|----------------------------|-----------------|----------------------------|---------------|
| 2033                  | \$33,985,000               | April 1, 2018   | 100%                       | 409327GT4     |
| 2038                  | 68,960,000                 | April 1, 2018   | 100                        | 409327CU5     |

#### Wastewater Revenue Bonds, Series 2011

| Maturity<br>(November 1) | Principal<br><u>Amount</u> | Redemption Date  | Redemption<br><u>Price</u> | <u>CUSIPs</u> |
|--------------------------|----------------------------|------------------|----------------------------|---------------|
| 2020                     | \$1,595,000                | November 1, 2019 | 100%                       | 409327EF6     |
| 2025                     | 660,000                    | November 1, 2019 | 100                        | 409327EL3     |
| 2026                     | 2,130,000                  | November 1, 2019 | 100                        | 409327EM1     |
| 2027                     | 2,225,000                  | November 1, 2019 | 100                        | 409327EP4     |
| 2028                     | 2,345,000                  | November 1, 2019 | 100                        | 409327EQ2     |
| 2029                     | 500,000                    | November 1, 2019 | 100                        | 409327ER0     |
| 2029                     | 1,960,000                  | November 1, 2019 | 100                        | 409327EV1     |
| 2030                     | 2,585,000                  | November 1, 2019 | 100                        | 409327ES8     |
| 2031                     | 2,715,000                  | November 1, 2019 | 100                        | 409327ET6     |
| 2034                     | 8,750,000                  | November 1, 2019 | 100                        | 409327EN9     |

#### Wastewater Revenue Bonds, Series 2012A

| Maturity<br>(January 1) | Principal<br><u>Amount</u> | Redemption Date | Redemption<br><u>Price</u> | <u>CUSIPs</u> |
|-------------------------|----------------------------|-----------------|----------------------------|---------------|
| 2022                    | \$3,105,000                | January 1, 2021 | 100%                       | 409327FE8     |
| 2027                    | 3,960,000                  | January 1, 2021 | 100                        | 409327FK4     |
| 2028                    | 4,160,000                  | January 1, 2021 | 100                        | 409327FL2     |
| 2039*                   | 6,150,000                  | January 1, 2021 | 100                        | 409327FT5     |

To effect the refunding, a sufficient amount of the proceeds of the Series 2016A Bonds will be deposited in an escrow account (the "Escrow Fund") established by the District with The Bank of New York Mellon Trust Company, N.A. (in such capacity, the "Escrow Agent"), and will be invested in certain non-callable direct obligations or obligations the principal and interest on which are unconditionally guaranteed by the United States of America ("Defeasance Obligations") that mature in amounts and pay interest at rates sufficient to pay, when due, the principal, applicable redemption premiums, if any, and interest on the Refunded Bonds through their respective maturity or redemption dates, as applicable. The sufficiency of the Escrow Fund, including Defeasance Obligations and the income thereon, to pay such amounts will be verified by Bingham Arbitrage Rebate Services, Inc. See "VERIFICATION OF MATHEMATICAL COMPUTATIONS FOR THE REFUNDED BONDS." The Escrow Agent will be given irrevocable instructions to call the callable Refunded Bonds for redemption on the applicable redemption dates and at the applicable redemption prices.

\_

<sup>\*</sup> Denotes partially refunded maturity. The refunded portion of the maturity has been assigned the CUSIP Number 409327HX4 and the unrefunded portion of the maturity has been assigned the CUSIP Number 409327HY2. As permitted by the Fifth Supplemental Indenture authorizing the issuance of the Series 2012A Bonds, the District will direct the Trustee to credit the principal amount of the Series 2012A Bonds maturing January 1, 2039 against the Sinking Fund Requirement due on such bonds due January 1, 2037.

#### Series 2016B Bonds

The proceeds of the Series 2016B Bonds will be applied (i) to finance a portion of the costs of the Capital Improvement Program, (ii) refund all of the District's outstanding Subordinate 2011 Bonds, and (iii) to pay costs of issuing the Series 2016B Bonds. The District anticipates that the Series 2016B Bonds will be issued as variable rate bonds with a final maturity of August 1, 2046. The Series 2016B Bonds are not offered by means of this Official Statement and are expected to be issued on or about April 1, 2016.

The issuance of the Series 2016B Bonds is not contingent on the issuance of the Series 2016A Bonds, and the issuance of the Series 2016A Bonds is not contingent upon the issuance of the Series 2016B Bonds.

## **Future Financings**

The District anticipates that it will finance a portion of its Capital Improvement Program through the issuance of Additional Bonds (as hereinafter defined), VRA Subordinate Obligations (as hereinafter defined), and other Indebtedness subordinate to Indebtedness secured by the Trust Agreement ("Junior Obligations"). The District currently anticipates that it will issue approximately \$50,000,000 Subordinate Wastewater Revenue Bonds, Series 2016B on or about April 1, 2016, to finance its Capital Improvement Program and refund the Subordinate Wastewater Revenue Bonds, Series 2011. Aside from the Series 2016B Bonds, subject to the factors set forth in this paragraph and the following paragraph, however, the District currently has no plans to issue Additional Bonds, VRA Subordinate Obligations or other Indebtedness for Capital Improvement Program costs prior to December 31, 2016. See "SECURITY AND SOURCES OF PAYMENT—Outstanding Senior Obligations," —Additional Senior Obligations," and "—Additional Parity Obligations." Any acceleration of the Capital Improvement Program could result in an acceleration of the date and, potentially, an increase the size of any issuance of Indebtedness by the District.

The District's Line of Credit has a maximum outstanding authorization of \$90 million to provide interim financing for the Capital Improvement Program. The Line of Credit constitutes a Junior Obligation under the Trust Agreement and is secured on a subordinate basis from the lien on Net Revenues Available for Debt Service securing Parity Obligations. Following the issuance of the Series 2016A Bonds, the District plans to reduce the maximum outstanding authorization on the Line of Credit to \$1 million. On or about the second quarter of 2017, to fund its CIP, the District plans to consider increasing the maximum outstanding authorization on the Line of Credit, issuing Parity Obligations or incurring additional Junior Obligations. In the future, based on market conditions, the District may also consider providing interim financing for its CIP through a commercial paper program rather than the Line of Credit. For planning purposes, certain projections in this Official Statement assume that beginning in the fiscal year ending June 30, 2017, the District maintains a commercial paper program in the amount of \$125 million.

The District has no current plans to issue additional Senior Obligations under the Senior Trust Agreement and plans to use the Trust Agreement as the principal operating lien for the issuance of indebtedness to finance the District's Capital Improvement Program. See "SECURITY AND SOURCES OF PAYMENT—Additional Senior Obligations" below.

#### SOURCES AND USES OF FUNDS

# **Sources**

Uses

| Principal Amount of Series 2016A Bonds.  Net Bond Premium  District Contribution  Total Sources of Funds | \$246,845,000<br>42,243,962<br>1,085,603<br>\$290,174,565 |
|--|---|
| Deposit to Construction Fund   | \$ 68,905,532   |
| Refinancing of Outstanding Advances  Deposit to Escrow Fund  Costs of Issuance                           | 56,094,468<br>164,083,640<br>410,322                      |
| Underwriters' Discount   | 680,603   |

Total Uses of Funds....

#### THE SERIES 2016A BONDS

\$290,174,565

#### **Description**

The Series 2016A Bonds will be dated, bear interest and mature as set forth on the cover and inside cover pages of this Official Statement. The Series 2016A Bonds are issuable as registered bonds without coupons in the denomination of \$5,000 or any whole multiple thereof as provided in the Trust Agreement. Interest will be payable on each February 1 and August 1, commencing August 1, 2016. The principal of and the interest on the Series 2016A Bonds will be payable as described below under "—Book-Entry Only System."

# **Book-Entry Only System**

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Series 2016A Bonds. The Series 2016A Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered bond certificate will be issued for each maturity of the Series 2016A Bonds and will be deposited with DTC. Additional information respecting DTC and its book entry system is contained in Appendix F.

The information in this section and in Appendix F concerning DTC and DTC's book-entry system has been obtained from sources that the District believes to be reliable, but the District takes no responsibility for the accuracy thereof.

DTC may discontinue providing its services as depository with respect to the Series 2016A Bonds at any time by giving reasonable notice to the District. Under such circumstances, if a successor depository is not obtained, certificates for the Series 2016A Bonds are required to be printed and delivered.

The District may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, certificates for the Series 2016A Bonds will be printed and delivered.

# **Redemption Provisions**

#### **Optional Redemption**

The District may, at its option, redeem the Series 2016A Bonds due on and after August 1, 2027, prior to their respective maturities, as a whole or in part, on any date, beginning August 1, 2026, at a redemption price equal to the principal amount thereof, together with interest accrued to the date fixed for redemption.

# Mandatory Redemption

The Series 2016A Bonds due on August 1, 2043, are subject to mandatory sinking fund redemption on August 1 in the following years in the following principal amounts ("Sinking Fund Requirements") at a redemption price equal to the principal amount thereof, together with interest accrued to the date of redemption.

Term Bonds due August 1, 2043

| <u>Year</u> | Sinking Fund Requirement  |
|-------------|---------------------------|
| 2038        | \$2,815,000               |
| 2039        | 2,935,000                 |
| 2040        | 3,070,000                 |
| 2041        | 3,200,000                 |
| 2042        | 7,280,000                 |
| 2043        | $6{,}950{,}000^{\dagger}$ |
|             |                           |

<sup>†</sup> Unamortized balance at maturity.

In the event of a partial optional redemption or purchase of such term bonds, the District will credit the principal amount of such term bonds so purchased or redeemed against the Sinking Fund Requirements for the remaining term bonds outstanding in such amounts and in such years as it in its sole discretion shall determine.

#### **Notice of Redemption**

Notice of redemption is to be given not more than 60 nor less than 30 days before the redemption date by first class mail to the registered owner or owners of the Series 2016A Bonds or portions thereof to be redeemed; provided, however, that any defect in such notice or the failure so to mail any such notice to any owners of any Series 2016A Bonds will not affect the validity of the proceedings for the redemption of any other Series 2016A Bonds. During the period that DTC or its nominee is the registered holder of the Series 2016A Bonds, the Bond Registrar will not be responsible for mailing notices of redemption to the beneficial owners of the Series 2016A Bonds. See "-Book-Entry Only System" above and Appendix F. Each such notice will set forth the Series 2016A Bonds or portions thereof to be redeemed, the date fixed for redemption, the redemption price to be paid, and if less than all the Series 2016A Bonds will be called for redemption, the maturities of the Series 2016A Bonds to be redeemed and shall otherwise comply with Securities Exchange Act of 1934 Release No. 34-23856, dated December 3, 1986, including the requirement that notice be given to all organizations registered with the Securities and Exchange Commission as securities depositories, and to one or more information services of national recognition that disseminate redemption information with respect to tax-exempt securities. If any Series 2016A Bond is to be redeemed in part only, the notice of redemption will state also that on or after the redemption date, upon surrender of such Series 2016A Bond, a new Series 2016A Bond in an authorized

denomination and in principal amount equal to the unredeemed portion of such Series 2016A Bond will be issued.

Any notice of optional redemption of the Series 2016A Bonds may state that it is conditioned upon there being available an amount of money sufficient to pay the redemption price, consisting of par plus interest accrued and unpaid to the redemption date, and any conditional notice so given may be rescinded at any time before the payment of the redemption price if any such condition so specified is not satisfied. If a redemption does not occur after a conditional notice is given due to an insufficient amount of funds on deposit with the Trustee, the corresponding notice of redemption will be deemed to be revoked.

If the District gives an unconditional notice of redemption, then on the redemption date the Series 2016A Bonds called for redemption will become due and payable. If the District gives a conditional notice of redemption and money to pay the redemption price of the affected Series 2016A Bonds has been set aside in escrow with the Trustee for the purpose of paying such Series 2016A Bonds, then on the redemption date such Series 2016A Bonds will become due and payable. In either case, if on the redemption date the Trustee holds money to pay the Series 2016A Bonds called for redemption, thereafter no interest will accrue on those Series 2016A Bonds, and a Bondholder's right will be to receive payment of the redemption price upon surrender of those Series 2016A Bonds.

#### SECURITY AND SOURCES OF PAYMENT

THE SERIES 2016A BONDS ARE SPECIAL OBLIGATIONS OF THE DISTRICT PAYABLE SOLELY FROM THE NET REVENUES AVAILABLE FOR DEBT SERVICE AND OTHER FUNDS PLEDGED TO SECURE THE SERIES 2016A BONDS UNDER THE TRUST AGREEMENT. THE SERIES 2016A BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT, OR A PLEDGE OF THE FAITH AND CREDIT, OF THE COMMONWEALTH OF VIRGINIA OR OF ANY COUNTY, CITY, TOWN OR POLITICAL SUBDIVISION THEREOF. THE ISSUANCE OF THE SERIES 2016A BONDS SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE COMMONWEALTH OF VIRGINIA OR ANY COUNTY, CITY, TOWN OR POLITICAL SUBDIVISION THEREOF TO LEVY OR TO PLEDGE ANY FORM OF TAXATION WHATEVER THEREFOR.

#### General

Principal of and interest on the Series 2016A Bonds will be payable from "Net Revenues Available for Debt Service" of the District pledged to the payment thereof and money held in certain funds and accounts under the Trust Agreement.

"Net Revenues Available for Debt Service" means all Net Revenues less debt service on Senior Obligations.

The realization of amounts to be derived upon the enforcement of the Series 2016A Bonds will depend upon the exercise of various remedies specified in the Trust Agreement. These and other remedies may, in many respects, require judicial action of a nature that is often subject to discretion and delay. Under existing laws, the remedies specified in the Trust Agreement may not be readily available or may be limited. A court may decide not to order the specific performance of the covenants contained in the Trust Agreement. The various legal opinions to be delivered concurrently with the delivery of the Series 2016A Bonds will be qualified as to the enforceability of the various legal instruments by limitations imposed by state and federal laws, rulings and decisions affecting remedies and by

bankruptcy, fraudulent conveyance, reorganization and other laws affecting the enforcement of creditors' rights generally.

Under the Trust Agreement, the District is subject to covenants relating to maintenance of a specified Long-Term Debt Service Coverage Ratio and restricting, among other things, incurrence of Indebtedness and the existence of liens on Property. See "—Limitations on Indebtedness" and "—Limitation on Creation of Liens" in Appendix C hereto.

#### **Rate Covenant**

In the Trust Agreement, the District covenants to set and revise its rates and charges for facilities, services and products such that the Net Revenues, calculated at the end of each Fiscal Year, will equal at least 120% of the sum of (a) the Principal and Interest Requirements (as defined in the Senior Trust Agreement) on Senior Obligations and (b) the Principal and Interest Requirements on Parity Obligations (the "Rate Covenant"). If, for any reason, the Net Revenues are insufficient to satisfy the foregoing covenant, the District shall within one hundred and twenty (120) days adjust and increase its rates, fees and other charges (to the extent permitted by the Enabling Act) or reduce its current expenses so as to provide sufficient Net Revenues to satisfy the Rate Covenant.

On or before the last day of each Fiscal Year, the District will review the adequacy of its rates, fees and other charges for the next Fiscal Year, and, if such review indicates the District's rates, fees and other charges are insufficient to satisfy the Rate Covenant, the District will promptly take appropriate action to increase its rates, fees and other charges or reduce its current expenses to cure any deficiency. See "—Rate Covenant" in Appendix C hereto.

#### **Outstanding Senior Obligations**

As of January 31, 2016, the District has outstanding five series of Bonds constituting Senior Obligations under the Senior Trust Agreement, including its Wastewater Revenue Bonds, Series 2008 (the "Senior 2008 Bonds"), of which \$113,410,000 principal amount is outstanding, its Wastewater Revenue Bonds, Series 2009 (the "Senior 2009 Bonds"), of which \$131,220,000 principal amount is outstanding, its Wastewater Revenue Bonds, Series 2011 (the "Senior 2011 Bonds"), of which \$31,225,000 principal amount is outstanding, its Wastewater Revenue Bonds, Series 2012 (the "Senior 2012 Bonds") of which \$109,530,000 principal amount is outstanding and its Wastewater Revenue Bonds, Refunding Series 2014A (the "Senior 2014 Bonds") of which \$111,345,000 principal amount is outstanding. After the issuance of the Series 2016A Bonds, there will be approximately \$350,945,000 of Senior Bonds outstanding. See "PLAN OF FINANCING—Plan of Refunding" above.

Since May 2009, the District has obtained seven loans from the Virginia Resources Authority Revolving Fund and issued, in evidence of its obligations to repay such loans, its bonds constituting Senior Obligations under the Trust Agreement (the "VRA Senior Bonds" and, together with the Senior Bonds, "Senior Obligations"). Such VRA Senior Bonds are secured under the Senior Trust Agreement on a parity with all other Senior Obligations, including the Senior 2008 Bonds, the Senior 2009 Bonds, the Senior 2011 Bonds, the Senior 2012 Bonds and the Senior 2014 Bonds. As of January 31, 2016, the District had drawn \$112,443,915 of such VRA Senior Bonds, with no remaining undrawn authorized amount. See also "–Parity Obligations."

#### **Additional Senior Obligations**

Under the Senior Trust Agreement, the District may issue and incur additional Senior Obligations for the District's Capital Improvement Program or to refund outstanding Senior Obligations subject to the

District's demonstrating its compliance with the conditions for the incurrence thereof under the Senior Trust Agreement or the new Senior Obligations qualifying for an exception thereto.

At this time, the District does not currently intend to issue additional Senior Obligations under the Senior Trust Agreement and plans to use the Trust Agreement as the principal operating lien for the issuance of indebtedness to finance the District's Capital Improvement Program. In addition, as market conditions permit, the District intends to refund outstanding Senior Obligations with the proceeds of Bonds issued under the Trust Agreement and, subject to certain conditions, certain VRA Senior Bonds will become VRA Subordinate Obligations. Notwithstanding the District's intention to use the Trust Agreement as its principal operating lien, the District has not formally closed the lien of the Senior Trust Agreement and may issue additional Senior Obligations for the purposes described above.

# **Parity Obligations**

As of January 31, 2016, the District has outstanding two series of Bonds constituting Parity Obligations under the Trust Agreement, including its variable rate Subordinate Wastewater Revenue Bonds, Series 2011 (the "Subordinate 2011 Bonds"), of which \$25,000,000 principal amount is outstanding and its Subordinate Wastewater Revenue Bonds, Refunding Series 2012 (Federally Taxable) (the "Subordinate 2012 Bonds"), of which \$4,030,000 principal amount is outstanding. The Subordinate 2011 Bonds are expected to be refunded by the Series 2016B Bonds.

In addition to the VRA Senior Bonds described under "Outstanding Senior Obligations" above, since 1993, the District has borrowed over \$177 million from the Virginia Resources Authority Revolving Loan Fund and issued, in evidence of its obligations to repay such loans, 10 issues of bonds that are outstanding Parity Indebtedness and recognized as such under the Trust Agreement (the "VRA Subordinate Obligations" and collectively, with the Subordinate 2011 Bonds, the Subordinate 2012 Bonds, the Series 2016A Bonds, when, as and if issued, the Series 2016B Bonds, when, as and if issued, and other Bonds or additional VRA Subordinate Obligations issued from time to time under the provisions of the Trust Agreement, the "Parity Obligations"). As of January 31, 2016, the outstanding drawn amount of the VRA Subordinate Obligations was \$62,887,481. The terms of the VRA Subordinate Obligations generally state that the lien thereof on the Net Revenues of the District is in all respects subordinate and inferior to the lien thereon of Senior Obligations outstanding under the Senior Trust Agreement. Generally, after an initial period where no interest accrues on such VRA Subordinate Obligations, interest accrues on the disbursed principal of the outstanding Parity Obligations at interest rates ranging from 1.70% to 4.10% per annum, and principal and interest are payable in installments over the 20-year terms of the VRA Subordinate Obligations. The VRA Subordinate Obligations have been issued for various improvements and upgrades at several of the District's treatment plants. See the table "DEBT SERVICE REQUIREMENTS FOR SENIOR OBLIGATIONS AND PARITY OBLIGATIONS" and "—Limitation on Creation of Liens" in Appendix C. The Series 2016A Bonds are on parity under the Trust Agreement with the Outstanding VRA Subordinate Obligations as to their subordinate lien on the Net Revenues of the District.

#### **Additional Parity Obligations**

Under the Trust Agreement, the District may issue Additional Parity Obligations, including Additional Bonds and VRA Subordinate Obligations, for the District's Capital Improvement Program or to refund outstanding Senior Indebtedness or Parity Obligations subject to the District's demonstrating its compliance with the conditions for the incurrence thereof under the Trust Agreement or qualifying for an exception thereto. The District anticipates that it will finance a portion of its Capital Improvement Program with future issues of Additional Parity Obligations, which may be evidenced by additional VRA Subordinate Obligations and Junior Obligations. See "—Limitations on Indebtedness" in Appendix C.

#### **Trust Agreement Amendments**

Coincident with the issuance of the Series 2016A Bonds, the District and the Trustee will enter into the Amended and Restated Trust Agreement. The Amended and Restated Trust Agreement amends and restates the Original Trust Agreement. A copy of the proposed form of the Amended and Restated Trust Agreement reflecting the proposed amendments to be effected thereby (the "Amendments") may be obtained on the Electronic Municipal Markets Access ("EMMA") system maintained by the Municipal Securities Rulemaking Board ("MSRB") (emma.msrb.org) and at the District's investor relations webpage (www.hrsdbonds.com) and, during the initial underwriting period for the Series 2016A Bonds, upon request to any of the Underwriters. The following summary of the proposed amendments to be made by the Amended and Restated Trust Agreement is qualified in all respects by reference to the text thereof

Set forth below is a summary of the substantive amendments to the Original Trust Agreement that are incorporated in the Amended and Restated Trust Agreement:

- 1. The definition of "Operating Expense" will be amended to allow the District to finance certain capital improvements in the District's service area that will not be owned by the District, but will, in the reasonable judgment of the Commission, maintain or improve the integrity of the Wastewater System.
- 2. Certain formulas, including the Long-Term Debt Service Coverage Requirement, will be clarified to provide that such calculation will be done on a cash-basis, which better reflects the District's actual revenues and expenses.
- 3. The Rate Covenant will be amended to provide that the District will fix and collect rates, fees and other charges such that in each Fiscal Year the Net Revenues will equal at least 120% of the sum of (a) the Principal and Interest Requirements (as defined in the Senior Trust Agreement) on the Senior Obligations and (b) the Principal and Interest Requirements on Parity Obligations. This represents an increase from 100% under the Trust Agreement.
- 4. The additional bonds test will be revised to provide for both historic and forward-looking tests.

EACH INITIAL PURCHASER OF THE SERIES 2016A BONDS WILL, BY ACCEPTING DELIVERY OF SUCH SERIES 2016A BOND, BE DEEMED TO HAVE CONSENTED TO THE EXECUTION AND DELIVERY OF THE AMENDED AND RESTATED TRUST AGREEMENT. SEE APPENDIX C "SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT."

#### **Amendments relating to VRA Obligations**

Pursuant to a Master Financing Agreement, dated as of February 1, 2016 (the "VRA Financing Agreement"), between the District and VRA relating to the VRA Senior Bonds and the VRA Subordinate Obligations (collectively, the "VRA Obligations"), VRA and the District have amended and restated all of the Financing Agreements pursuant to which the VRA Obligations were issued and have agreed that, under certain conditions set forth in the VRA Financing Agreement, some or all of the VRA Senior Bonds will become VRA Subordinate Obligations secured as Parity Obligations under the Trust Agreement and will no longer be Senior Obligations secured under the Senior Trust Agreement (the "Migrating VRA Senior Bonds"). The Migrating VRA Senior Bonds will, from time to time, convert from senior lien status to parity lien status, subject to the following conditions set forth in the VRA Financing Agreement:

- (a) There are no existing defaults or events of default under the terms of any debt of the District;
  - (b) The Senior Trust Agreement is legally closed to the issuance of additional debt;
- (c) The District maintains at least a "AA-" or equivalent rating by two nationally-recognized statistical rating organizations on its debt outstanding under the Trust Agreement;
- (d) The District has not issued any Senior Obligations after the date of the VRA Financing Agreement;
- (e) Beginning with its Fiscal Year ending June 30, 2017, the District demonstrates that it has complied with the budgetary principles of its financial policy in effect as of the dated date of the VRA Financing Agreement to budget for minimum total debt service coverage of 1.4 times, i.e., such budgetary principles providing in pertinent part that the District will adopt operating and capital budgets that it projects will enable the District to maintain net revenues at a minimum of 1.4 times total debt service requirements, and in calculating compliance with the foregoing, the District may make reasonable adjustments to net revenues as presented on a GAAP basis;
- (f) Receipt by the District of various certificates and opinions, in form and substance satisfactory to VRA; and
- (g) The District has amortized or defeased its Senior Obligations such that the total par amount of debt outstanding under the Senior Trust Agreement is 15% or less of the par amount of the District's total debt outstanding (taking into account the Migrating VRA Senior Bonds).

If only conditions (a) through (f) above are met (and condition (g) is not), the Migrating VRA Senior Bonds are to migrate from time to time to the position of Parity Obligations on a pro rata basis such that the ratio of VRA to District debt with a pledge of Net Revenues senior to the Parity Bonds is maintained at approximately 16.5% per Fiscal Year. Unless VRA and the District agree otherwise in writing, the Migrating VRA Senior Bonds are to migrate to the position of VRA Subordinate Obligations in reverse order of maturity. The Migrating VRA Senior Bonds may become VRA Subordinate Obligations without meeting any of the incurrence tests set forth in the Trust Agreement. See "—Limitations on Indebtedness" in Appendix C.

Once a Migrating VRA Senior Bond has migrated to the position of a Parity Obligation, such migration will not be reversed at a later date due to the District no longer meeting conditions (a), (c), (e) or (g) set forth above.

The conditions to migration of VRA Senior Bonds to parity lien status are not covenants with VRA (or under the Senior Trust Agreement or the Trust Agreement), and any failure of the District to meet such conditions will not constitute a default under the VRA Financing Agreement, the Senior Trust Agreement or the Trust Agreement. The sole consequence of a failure to meet any such condition under the VRA Financing Agreement would be that the VRA Senior Bonds would not convert from senior lien status to parity lien status pursuant to the VRA Financing Agreement.

# $\begin{array}{c} \textbf{DEBT SERVICE REQUIREMENTS} \\ \textbf{FOR PARITY OBLIGATIONS}^{(1)} \end{array}$

# [In Thousands of Dollars]

Series 2016A Bonds

| Scres 2010/1 Bonds                |                      | us                   |                      |  |  |
|-----------------------------------|----------------------|----------------------|----------------------|--|--|
| Fiscal Year<br>Ending<br>June 30, | <u>Principal</u>     | <u>Interest</u>      | Debt Service         | Outstanding Parity Obligations Debt Service <sup>(2)</sup> | Total Parity<br>Obligations Debt<br><u>Service</u> |
| 2016                              | _                    | -                    | -                    | \$ 3,268,848   | \$ 3,268,848                                       |
| 2017                              | \$3,525,000          | \$ 9,813,098         | \$13,338,098         | 10,042,342   | 23,380,441   |
| 2018                              | 2,400,000            | 11,160,600           | 13,560,600           | 7,503,376  | 21,063,976   |
| 2019                              | 2,520,000            | 11,037,600           | 13,557,600           | 7,504,212  | 21,061,812   |
| 2020                              | 2,650,000            | 10,908,350           | 13,558,350           | 7,506,081  | 21,064,431   |
| 2021                              | 4,160,000            | 10,738,100           | 14,898,100           | 7,014,853  | 21,912,953   |
| 2022                              | 5,875,000            | 10,487,225           | 16,362,225           | 6,639,129  | 23,001,354   |
| 2023                              | 3,080,000            | 10,263,350           | 13,343,350           | 6,419,676  | 19,763,026   |
| 2024                              | 3,235,000            | 10,105,475           | 13,340,475           | 6,212,924  | 19,553,399   |
| 2025                              | 3,405,000            | 9,939,475            | 13,344,475           | 6,209,476  | 19,553,951   |
| 2026                              | 3,985,000            | 9,770,325            | 13,755,325           | 6,211,207  | 19,966,532   |
| 2027                              | 9,640,000            | 9,493,500            | 19,133,500           | 6,132,366  | 25,265,866   |
| 2028                              | 10,080,000           | 9,048,700            | 19,128,700           | 3,026,195  | 22,154,895   |
| 2029                              | 6,125,000            | 8,643,575            | 14,768,575           | 2,972,676  | 17,741,251   |
| 2030                              | 6,435,000            | 8,329,575            | 14,764,575           | 2,974,400  | 17,738,975   |
| 2031                              | 17,825,000           | 7,723,075            | 25,548,075           | 2,975,667  | 28,523,742   |
| 2032                              | 18,735,000           | 6,809,075            | 25,544,075           | 991,724  | 26,535,799   |
| 2033                              | 19,620,000           | 5,923,350            | 25,543,350           | 988,276  | 26,531,626   |
| 2034                              | 20,550,000           | 4,992,250            | 25,542,250           | 990,000  | 26,532,250   |
| 2035                              | 21,085,000           | 3,951,375            | 25,036,375           | 1,240,892  | 26,277,267   |
| 2036                              | 15,940,000           | 3,160,350            | 19,100,350           | 4,208,901  | 23,309,251   |
| 2037                              | 22,705,000           | 2,529,975            | 25,234,975           | 4,225,880  | 29,460,855   |
| 2038                              | 17,020,000           | 1,738,000            | 18,758,000           | 4,245,842  | 23,003,842   |
| 2039                              | 2,815,000            | 1,242,125            | 4,057,125            | 4,262,639  | 8,319,764  |
| 2040                              | 2,935,000            | 1,098,375            | 4,033,375            | 4,283,829  | 8,317,204  |
| 2041                              | 3,070,000            | 948,250              | 4,018,250            | 4,300,005  | 8,318,255  |
| 2042                              | 3,200,000            | 791,500              | 3,991,500            | 4,322,526  | 8,314,026  |
| 2043                              | 7,280,000            | 529,500              | 7,809,500            | 505,000  | 8,314,500  |
| 2044                              | 6,950,000            | 173,750              | 7,123,750            | 1,189,643  | 8,313,393  |
| 2045                              | -                    | -                    | -                    | 8,312,826  | 8,312,826  |
| 2046                              | _                    | _                    | _                    | 8,306,812  | 8,306,812  |
| 2047                              | <del>-</del>         |                      |                      | 8,302,175  | 8,302,175  |
| TOTAL                             | <u>\$246,845,000</u> | <u>\$181,349,898</u> | <u>\$428,194,898</u> | <u>\$153,290,396</u>                                       | <u>\$581,485,294</u>                               |

Numbers may not add to totals due to rounding.
 Assumes the issuance of the Series 2016B Bonds bearing interest at a rate of 1.88%. Assumes that none of the VRA Senior Bonds become Migrating VRA Senior Bonds.

# DEBT SERVICE REQUIREMENTS FOR SENIOR OBLIGATIONS AND PARITY OBLIGATIONS<sup>(1)</sup>

# [In Thousands of Dollars]

| Fiscal Year<br>Ending<br><u>June 30,</u> | Total Senior<br>Obligations<br><u>Debt Service<sup>(2)</sup></u> | Total Parity<br>Obligations<br><u>Debt Service<sup>(3)</sup></u> | Total Debt<br><u>Service</u> |
|--|--|--|------------------------------|
| 2016                                     | \$ 9,759,520   | \$ 3,268,848   | \$13,028,368                 |
| 2017                                     | 35,425,099   | 23,380,441   | 58,805,540                   |
| 2018                                     | 37,717,741   | 21,063,976   | 58,781,716                   |
| 2019                                     | 37,330,328   | 21,061,812   | 58,392,140                   |
| 2020                                     | 37,269,808   | 21,064,431   | 58,334,238                   |
| 2021                                     | 35,647,772   | 21,912,953   | 57,560,724                   |
| 2022                                     | 34,111,941   | 23,001,354   | 57,113,295                   |
| 2023                                     | 37,294,564   | 19,763,026   | 57,057,591                   |
| 2024                                     | 37,211,998   | 19,553,399   | 56,765,397                   |
| 2025                                     | 37,127,172   | 19,553,951   | 56,681,123                   |
| 2026                                     | 36,370,975   | 19,966,532   | 56,337,507                   |
| 2027                                     | 30,900,438   | 25,265,866   | 56,166,304                   |
| 2028                                     | 30,799,375   | 22,154,895   | 52,954,270                   |
| 2029                                     | 35,055,349   | 17,741,251   | 52,796,600                   |
| 2030                                     | 34,942,325   | 17,738,975   | 52,681,300                   |
| 2031                                     | 24,427,223   | 28,523,742   | 52,950,966                   |
| 2032                                     | 21,299,520   | 26,535,799   | 47,835,319                   |
| 2033                                     | 19,178,707   | 26,531,626   | 45,710,333                   |
| 2034                                     | 17,072,333   | 26,532,250   | 43,604,583                   |
| 2035                                     | 16,935,146   | 26,277,267   | 43,212,413                   |
| 2036                                     | 16,794,755   | 23,309,251   | 40,104,006                   |
| 2037                                     | 10,494,825   | 29,460,855   | 39,955,679                   |
| 2038                                     | 16,801,768   | 23,003,842   | 39,805,610                   |
| 2039                                     | 16,638,999   | 8,319,764  | 24,958,764                   |
| 2040                                     | 13,967,932   | 8,317,204  | 22,285,136                   |
| 2041                                     | 5,615,400  | 8,318,255  | 13,933,655                   |
| 2042                                     | 5,618,400  | 8,314,026  | 13,932,426                   |
| 2043                                     | 5,613,600  | 8,314,500  | 13,928,100                   |
| 2044                                     | 5,616,000  | 8,313,393  | 13,929,393                   |
| 2045                                     | -  | 8,312,826  | 8,312,826                    |
| 2046                                     | -  | 8,306,812  | 8,306,812                    |
| 2047                                     |  | 8,302,175  | 8,302,175                    |
| TOTAL                                    | <u>\$703,039,015</u>   | <u>\$581,485,294</u>   | \$1,284,524,309              |

 <sup>(1)</sup> Numbers may not add to totals due to rounding.
 (2) See "SECURITY AND SOURCES OF PAYMENT—Outstanding Senior Obligations." Does not include debt service on the Refunded

Assumes that none of the VRA Senior Bonds become Migrating VRA Senior Bonds. Assumes the issuance of the Series 2016B Bonds bearing interest at a rate of 1.88%.

#### HAMPTON ROADS SANITATION DISTRICT

#### **Authorization and Purpose**

Creation of the District was approved in a 1940 public referendum authorized by the Virginia General Assembly. A political subdivision of the Commonwealth of Virginia (the "Commonwealth"), the District was established as a governmental instrumentality to provide for the public health and welfare. Chapter 66, Acts of the Assembly of 1960, validated and confirmed prior legislation creating the District and repealed earlier acts of the Virginia General Assembly enacted with respect to the District.

The District was created for the specific purpose of abating pollution in the Hampton Roads area of Virginia through the interception of existing wastewater outfalls, the construction of wastewater treatment facilities and the installation of interceptors throughout the service area. The District does not provide water, solid waste disposal or storm water mitigation. The cities, counties and military establishments the District serves provide those services. With the exception of the Counties of King William, King and Queen, Middlesex and Mathews and the Town of Urbanna, the collection systems, consisting of lateral sewers and sub trunk facilities which carry wastewater from industries, homes, apartments and businesses to the District's interceptor system, are the responsibility of the various cities, counties and military establishments within the District.

The District is a separate legal entity from the various cities, counties and military establishments within the District. See "—The Commission" below.

## **History**

The District traces its origins 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." Subsequent studies recommended a public body to construct and operate a sewage system in the area.

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." In a referendum held on November 5, 1940, a majority of the voters approved the creation of the District.

The District's first construction project, the Warwick County Trunk Sewer, began on June 26, 1946. The District commenced operations on July 1, 1946, using facilities acquired from the United States Government. The District's first treatment plant, the Army Base Plant, commenced operations on October 14, 1947. Since that time, the facilities of the District have been expanded to provide wastewater treatment service to all major population centers within its boundaries.

#### The Commission

The District operates under the direction of its governing body, the Hampton Roads Sanitation District Commission (the "Commission"), comprised of eight members appointed by the Governor for staggered terms of four years. Members of the Commission may be reappointed without limitation and may be suspended or removed by the Governor at his pleasure. The Commission annually elects one of its members as Chairman and another as Vice Chairman. Under the Enabling Act, the eight members of the Commission must be residents of the cities and counties of the District as follows: one member from each of the cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach; one

member from the City of Suffolk or Isle of Wight County; and one member from the City of Williamsburg or Poquoson, or Gloucester, James City, King William, King and Queen, Mathews, Middlesex, or York County or the Town of Urbanna.

The Commission is empowered, among other things, to (1) construct and to improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a wastewater system or systems, either within or without or partly within and partly without the corporate limits of the District, and to construct wastewater improvements within the corporate limits of the District, (2) issue the District's bonds, payable solely from revenues, to pay all or part of the cost of a wastewater system, (3) fix, revise, charge and collect rates, fees and charges for the use of and for the services of any system operated by the District, (4) enter into contracts with any unit, including counties, cities and other authorities, relating to the furnishing of services of the District, and (5) acquire real or personal property necessary in connection with wastewater systems or wastewater improvements.

The current members of the Commission and their resumes are set forth below.

| <u>Commissioners</u>                        | <u>Residence</u> | <b>Occupation</b>  | Term<br>Expires<br><u>June 7,</u> |
|---|------------------|--|-----------------------------------|
| Vishnu K. Lakdawala, Ph.D., <i>Chairman</i> | Virginia Beach   | Associate Professor,<br>Electrical and Computer<br>Engineering, Old Dominion<br>University             | 2018                              |
| Frederick N. Elofson, CPA, Vice Chairman    | Newport News     | Retired Certified Public<br>Accountant and Personal<br>Financial Specialist,<br>Goodman & Company, LLP | 2018                              |
| Arthur C. Bredemeyer                        | Suffolk          | Attorney, Cooper, Spong and Davis P.C.   | 2017                              |
| Michael E. Glenn                            | Norfolk          | President, Luna<br>Development Services, LLC   | 2019                              |
| Willie Levenston, Jr.                       | Portsmouth       | Retired Supervisor<br>Electronic Engineer, Norfolk<br>Naval Shipyard                                   | 2019                              |
| Maurice P. Lynch, Ph.D.                     | Gloucester Point | Professor Emeritus, Virginia<br>Institute of Marine Science,<br>College of William and<br>Mary         | 2017                              |
| Stephen C. Rodriguez                        | Chesapeake       | Owner and President, Cruco, Inc.   | 2016                              |
| Susan M. Rotkis                             | Hampton          | Attorney, Consumer Litigation Associates, P.C.   | 2016                              |

Vishnu K. Lakdawala, Ph.D., Chairman. Dr. Lakdawala, a member of the Commission since June 8, 2002, obtained his undergraduate degree in electrical engineering from Bangalore University in India in 1972 and his Master of Engineering Degree in High Voltage Engineering from Indian Institute of Science in 1974. He worked as Research and Development Engineer in Jyoti Limited for three years in the high voltage instrument transformers division. He received his Ph.D. in electrical engineering from the University of Liverpool in 1980. After serving as senior research associate in the Department of Electrical Engineering and Electronics in the University of Liverpool for a year, he joined Oak Ridge National Laboratory, Oak Ridge, Tennessee, where he conducted research for a year. He joined the faculty of Old Dominion University in 1983 as Assistant Professor in the Department of Electrical and Computer Engineering. He is currently the Chief Departmental Advisor and Associate Professor of Electrical and Computer Engineering. Dr. Lakdawala currently serves as the president of the Hindu Temple of Hampton Roads. Dr. Lakdawala resides in the City of Virginia Beach.

Frederick N. Elofson, CPA, *Vice Chairman*. Mr. Elofson, a member of the Commission since July 1, 2006, is a Certified Public Accountant and recently retired senior partner in Goodman & Company, LLP, in Newport News. He earned a bachelor's degree in accounting from West Virginia University and has more than 30 years of accounting experience. A former chairman of the board and treasurer of the Peninsula Chamber of Commerce, Mr. Elofson remains active in numerous professional and civic organizations. He is a past treasurer and board member of the Schooner Virginia Project, a past president of the Peninsula Estate Planning Council, and has been honored as the Chamber's Volunteer of the Year. Mr. Elofson resides in the City of Newport News.

Arthur C. Bredemeyer, Commissioner. Mr. Bredemeyer, a member of the Commission since August 18, 2009, is an attorney with the law firm of Cooper, Spong and Davis P.C. After retiring from the United States Air Force with 20 years of service, he entered private practice, specializing in estate planning, taxation and elder law. During his last military posting, he was assigned to the Air Combat Command Headquarters at Langley Air Force Base, where he was chief of the International and Operations Law Division for the Air Force's largest command. Mr. Bredemeyer holds a bachelor's degree in accounting, history and political science from Illinois College, a J.D. from Washburn University, a master's in public administration from the University of Oklahoma, and a Master of Law Degree in Taxation from the College of William and Mary. Mr. Bredemeyer's civic activities have included serving as president of Suffolk Tomorrow, chair of the Suffolk Airport Commission and as a member of the board of Riddick's Folly Museum. Mr. Bredemeyer resides in the City of Suffolk.

<u>Michael E. Glenn, Commissioner.</u> Mr. Glenn, a member of the Commission since May 13, 2008, is president of Luna Development Services, LLC. The firm, which offers full-service general contracting and real estate development services, is a Certified Virginia Minority Business Enterprise. Before founding his firm in 2004, Mr. Glenn was Director of Operations, Real Estate Services and Contracts for Troutman Sanders, LLP. He also has served as a development executive for Armada Hoffler Development and as a Wachovia Bank vice president. Mr. Glenn received a bachelor's degree in psychology, with a minor in biology, from Old Dominion University. Mr. Glenn resides in the City of Norfolk.

<u>Willie Levenston, Jr., Commissioner</u>. Mr. Levenston, a member of the Commission since September 9, 2014, earned his Bachelor of Science in Engineering from Southern University in Baton Rouge, Louisiana. He retired from the Norfolk Naval Shipyard in 2008 after more than 40 years of service. In his capacity as Supervisor Electronics Engineer, Mr. Levenston was responsible for Surface Ship Exterior Radio Communications, Secure/Communication Information Processing, Naval Tactical Data Systems, Search Radar, Electronics Countermeasure/Navigational Aids, and the Submarine Communication sections. Mr. Levenston resides in the City of Portsmouth.

Maurice P. Lynch, Ph.D., Commissioner. Dr. Lynch, a member of the Commission since August 24, 2009, is professor emeritus of the College of William and Mary's Virginia Institute of Marine Science. Upon earning his bachelor's degree from Harvard College, Dr. Lynch was commissioned an ensign in the U.S. Navy Reserve and remained on active duty with the Underwater Demolition Team until July 1962. After filling numerous reserve billets, he retired in 1988 with the rank of Captain USNR. Dr. Lynch earned his master's and doctoral degrees from William and Mary, where he has been a member of the faculty since 1972. He has been a liaison to numerous universities as well as state and federal agencies. He has served as the Virginia Sea Grant director, director of the Chesapeake Bay Research Consortium and director of the Chesapeake Bay National Estuarine Research Reserve in Virginia. He has been an officer of several professional organizations, including the Virginia Academy of Science, the Coastal Society and the National Estuarine Research Reserve Association. Dr. Lynch also has served two terms on the Chesapeake Bay Foundation ("CBF") board of trustees and been a leader of CBF's York chapter. He served on the Middle Peninsula Planning District Commission from 1997 to 2015 and has served as its chair. Dr. Lynch resides in Gloucester Point.

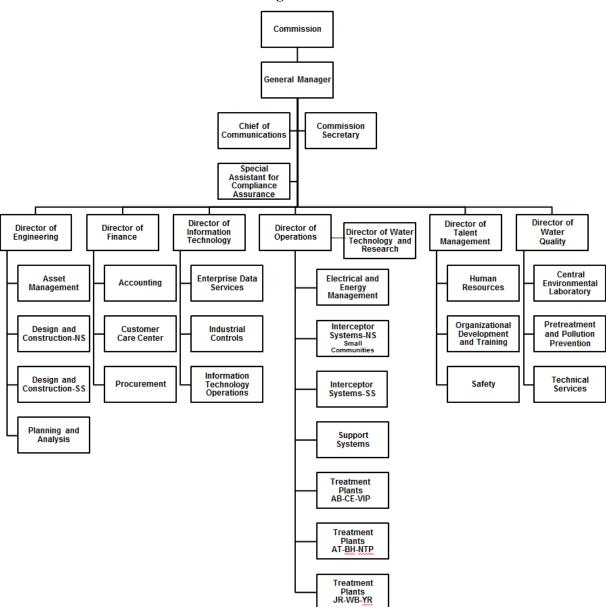
Stephen C. Rodriguez, Commissioner. Mr. Rodriguez, a member of the Commission since October 5, 2012, is the owner and president of Cruco Inc., which provides construction services in Hampton Roads. He currently serves on the boards of the Outer Banks Hospital and the Chesapeake Regional Medical Center. Mr. Rodriguez was named Chairman of the Foundation for Virginia Natural Resources and has served as president of the Deep Creek Ruritan Club. He also has been a member of the Chesapeake School Board, the Chesapeake Economic Development Authority and the board of directors of Opportunity, Inc. He holds a bachelor's degree in civil engineering technology and a certificate in civic leadership from Old Dominion University. Mr. Rodriguez resides in the City of Chesapeake.

<u>Susan M. Rotkis, Commissioner</u>. Ms. Rotkis, a member of the Commission since August 8, 2014, is an attorney with Consumer Litigation Associates, P.C. Ms. Rotkis, who has practiced law in Virginia since 1996, now focuses on federal consumer protection law. She began her legal career at the National Center for Missing and Exploited Children in Alexandria. As legal and legislative counsel, she was an advocate for the rights of child victims and their families. She also served as general counsel and corporate facility security officer of Total Immersion Software, Inc. (now Intific), a game developer and defense contractor headquartered in Hampton, Virginia. There she focused her practice on licensing, intellectual property, transactions, compliance and other business-related legal issues. Ms. Rotkis earned a bachelor's degree in journalism from Arizona State University and a J.D. from Georgetown University Law Center. She also served several years as a federal judicial law clerk. Ms. Rotkis resides in the City of Hampton.

#### **Management and Staff**

The District is managed through six departments, which are organized into functional divisions with their principal responsibilities summarized after the District's organizational chart set out below.

# **HRSD Organizational Chart**



# Engineering

• Design & Construction: Manages projects to ensure that contracted work is

performed according to HRSD's quality standards, fiscal

policies and environmental commitment.

• Planning & Analysis: Evaluates the service area's needs and determines the new

facilities necessary to expand services. Projects future demand flows, and reviews service area expansions. Responsible for the Geographical Information System (GIS), Regional Hydraulic Model, Capital Planning, and

Data Analysis.

• Asset Management: Provides systematic and risk-based analysis to manage

sustainable lifecycle costs of capital assets and optimize

maintenance programs. Responsible for the Computerized Maintenance Management System

(CMMS).

#### Finance

Accounting: Performs accounting and budget operations and treasury,

debt and risk management functions.

Procurement: Acquires goods and services.

• Customer Care Center: Responsible for billings, collections, maintenance of

customer accounts and liaison with HRSD customers.

## Information Technology

• Enterprise Data Services: Manages the enterprise databases and provides

software implementation services.

• Industrial Controls: Provides instrumentation and controls support for

Interceptor and Treatment plant divisions.

• Information Technology Operations: Manages the hardware and software needs

including troubleshooting and support.

#### Operations

• Electrical and Energy Management: Provides and/or coordinates engineering, electrical

and instrumentation services to design, modify and implement electrical, instrumentation and energy

management projects.

• Interceptor Operations North Shore: Operates and maintains the interceptor system in

the Cities of Hampton, Newport News, Poquoson and Williamsburg, the Counties of Gloucester, James City and York and the wastewater conveyance and treatment system within the Counties of King William, King and Queen,

Middlesex and Mathews.

• Interceptor Operations South Shore: Operates and maintains the interceptor system in

the Cities of Chesapeake, Norfolk, Portsmouth, Suffolk and Virginia Beach and the County of Isle

of Wight.

• Small Communities: Operates and maintains the collections systems and

treatment plants that serve the Middle Peninsula.

• Support Systems: Coordinates preventive and major corrective

maintenance programs including Automotive Maintenance, Carpenter, Electrical and Machine

Shop operations.

• Treatment Plants: Operates and maintains the Army Base, Atlantic,

Chesapeake-Elizabeth and VIP, Boat Harbor, James River, Nansemond, Williamsburg and York River

treatment plants.

Talent Management

• Human Resources: Responsible for human resources and benefits.

Organizational Development and Provides employee training and manages the

Training: apprenticeship program.

• Safety: Coordinates the safety program at HRSD.

Water Quality

• Central Environmental Laboratory: Performs all HRSD analytical testing.

• Pretreatment & Pollution Prevention: Controls all non-domestic waste discharged into the

HRSD system.

• Technical Services: Provides scientific/technical support of all HRSD

departments and administration of all HRSD

permits.

The District's administration is overseen by a General Manager, supported by eight directors and their staffs. For Fiscal Year 2016, the District budgeted for 803 full-time employees. Current staffing is sufficient to operate all existing facilities. None of its employees is currently represented by a union.

The following individuals are responsible for the daily management and affairs of the District:

# Edward G. Henifin, P.E., General Manager

Ted Henifin, a registered professional engineer, has served as HRSD's General Manager since 2006. The recipient of a bachelor's of science in civil engineering from the University of Virginia, Mr. Henifin also has completed the Water and Wastewater Leadership Program at the Kenan-Flagler Business School of the University of North Carolina at Chapel Hill. Mr. Henifin began his career in 1982 as a civil engineer in the facilities planning division of the Navy Public Works Center in Norfolk. He has served as a senior engineer with the Norfolk Redevelopment and Housing Authority and deputy site manager of the Navy Public Works Center at Little Creek. He worked for nine years as Director of Public Works for the City of Hampton before joining HRSD. Active in numerous professional and civic organizations, Mr. Henifin is president of the Virginia Association of Municipal Wastewater Agencies and serves on the boards of the National Association of Clean Water Agencies and VIRGINIA forever. He is also secretary of Langley Federal Credit Union, treasurer of the Hampton Neighborhood Development Partnership, president of the George Wythe Recreation Association, and a member of Congressman Scott Rigell's

Chesapeake Bay Advisory Committee. Mr. Henifin's honors include the Julian F. Hirst Award for Distinguished Service, presented by the American Society for Public Administration. In addition, he was among a select number of proven leaders chosen for the 2009 class of LEAD Virginia and the Civic Leadership Institute Class of 2015.

# **Donald C. Corrado**, Director of Information Technology

Prior to his appointment in 2008, Don Corrado served as HRSD's Chief of Information Technology for nine years. In that capacity he was responsible for the implementation of a scalable, fully-licensed, standards-based wide area network capable of supporting the various enterprise-class applications required to meet HRSD's business needs. Mr. Corrado's 20-year career includes public and private sector experience as an IT manager, enterprise solutions architect, information systems security officer, project leader and contract specialist. He earned a bachelor's degree from Old Dominion University and is a Master Certified NetWare Engineer, Microsoft Certified Systems Engineer and Nortel Certified Enterprise Solutions Provider. Mr. Corrado is also a U.S. Department of Defense Certified Acquisition Professional and Checkpoint Firewall One Certified. He is a member of the Gartner Executive Panel, American Water Works Association and Water Environment Federation ("WEF") and has completed the Kenan-Flagler Water and Wastewater Leadership Program.

## Steven G. de Mik, MBA, CPA, Director of Operations

Steve de Mik, who was named Director of Operations in 2015, joined HRSD in 2008. In his previous position of Director of Finance and Chief Financial Officer, Mr. de Mik was responsible for HRSD's general financial and business functions, including financial reporting, investment portfolio, debt and risk management, and customer billing. A certified public accountant, he holds an MBA from the College of William and Mary and has completed the Kenan-Flagler Water and Wastewater Leadership Program. Before joining HRSD, Mr. de Mik served for seven years as the Director of Finance and Business Services for the City of Norfolk. His duties in that post included managing the financial operations of the city including a pension system and a debt portfolio of approximately \$1 billion using three different credit structures. In addition, he was responsible for the city's parking, facilities maintenance and fleet operations. Mr. de Mik's years of progressively responsible public and private sector experience also include positions with Knox County, TN; Knoxville, TN; Chipman and McMurray, CPA's of Hendersonville, TN; and the Comptroller of the Treasury, Division of State Audit, Nashville, TN. He received a bachelor's degree in accounting and business administration from Southwest Baptist University in Bolivar, Missouri. Mr. de Mik also serves as chairman of the board of directors for Heart for Orphans, a nonprofit organization based in Williamsburg, VA.

# Phillip L. Hubbard, P.E., Special Assistant for Compliance Assurance

Phil Hubbard was the Sanitary Sewer Overflow Reduction Manager for the City of Virginia Beach prior to joining HRSD in 2007. In that capacity he ensured full compliance with regulatory orders, represented the City with the Virginia Department of Environmental Quality and the United States Environmental Protection Agency, served as Team Leader for the Regional Capacity Team, and managed contracts with consulting engineers. His extensive experience also includes more than 20 years as an operations manager in the city's public utilities department. A registered professional engineer, Mr. Hubbard holds a bachelor's degree in civil engineering from the Virginia Military Institute and has completed the Kenan-Flagler Water and Wastewater Leadership Program. He is a member of the American Society of Professional Engineers and WEF. He twice received the Virginia Beach City Manager's Creativity, Innovation and Public Service Award, and was named the Hampton Roads ASCE Government Engineer of the Year in 2010.

# Bruce W. Husselbee, P.E., Director of Engineering

Bruce Husselbee became Director of Engineering in July 2005. Before his promotion to this senior leadership position, he was a Project Manager in the Design and Construction Division for nine years. In that capacity he managed a number of large capital improvement projects. These included interceptor, treatment plant and water reclamation facilities. Mr. Husselbee previously worked in the consulting engineering field for 12 years. He holds a bachelor's degree in civil engineering and a master's degree in environmental engineering from George Washington University. He also has completed the Kenan-Flagler Water and Wastewater Leadership Program.

## James J. Pletl, Ph.D., Director of Water Quality

Jim Pletl was promoted to Director of Water Quality in December 2011. Previously, he was the Chief of Technical Services for five years. In that capacity, he managed HRSD's environmental monitoring and permitting program. He also served as an Environmental Scientist for 17 years, providing technical reviews and conducting planning for water quality studies. Dr. Pletl holds a bachelor's degree in Biology from Alfred University and a PhD in Biological Oceanography from Old Dominion University. He also is a graduate of the Kenan-Flagler Water and Wastewater Leadership Program. Dr. Pletl is the vice-chair of the National Association of Clean Water Agencies ("NACWA") Water Quality Committee and the chair of the Virginia Association of Municipal Wastewater Agencies ("VAMWA") Water Quality Committee. He has served on two federal advisory committees for EPA and several advisory groups to the Virginia Department of Environmental Quality. Dr. Pletl has also served on numerous Water Environment Research Foundation ("WERF") project oversight committees which define the goals and guide the work of WERF research relevant to wastewater utility issues.

#### Jay A. Bernas, P.E., MBA, Director of Finance

Jay Bernas was promoted to Director of Finance in October 2015. Before his promotion to this position, Mr. Bernas served as Chief of Planning and Analysis for ten years and was responsible for planning HRSD's \$1.4 billion Capital Improvement Program, performing business case analyses, system capacity analyses to support regional growth and managing four technical sections: Geographic Information Systems, Data Analysis, Hydraulic Modeling and Capital Planning. Prior to joining HRSD, he was a project manager with the City of Virginia Beach. Mr. Bernas graduated from Old Dominion University in 1995 with a degree in Civil Engineering and earned his MBA from the College of William & Mary in 2013. He also has completed the Kenan-Flagler Water and Wastewater Leadership Program and was part of the 2008 class for LEAD Hampton Roads. He received the George Robert House, Jr. award for young public administrators from the American Society for the Public Administration in 2006 and was recognized by Inside Business as a "Top Forty under 40" in 2011. Appointed by the Virginia Beach City Council to serve on the Planning Commission from 2006-2013, Mr. Bernas was its Chairman for the last two years of his tenure. He is a member of the Dominion Virginia Power Community Advisory Council and currently serves as Chairman of the St. Gregory's the Great School Board.

### Paula A. Hogg, Director of Talent Management

Paula Hogg became Director of Talent Management when the position was established in 2014. A graduate of Virginia Tech and the Kenan-Flagler Water and Wastewater Leadership Program, Ms. Hogg began her HRSD career in 1983. Her progressively responsible positions led to her selection as the Chief of Laboratory in 2005. In that capacity, she oversaw the effective operation of HRSD's state-of-the-art Central Environmental Laboratory and ensured proper internal analysis and regulatory control. Ms. Hogg played a key role in the effort to bring HRSD's laboratory into full compliance with Virginia's Laboratory Accreditation regulation. She also has led various inter-departmental teams, was instrumental

in the development of HRSD's quality program and served as one of the first facilitators. Ms. Hogg has been an active member of the Water Environment Federation and the Virginia Water Environment Association, where she served as Chair of the National Laboratory Practices Committee and as a member of the committee Leadership Council. She has also served on the Advocacy Committee for the National Environmental Laboratory Accreditation Conference Institute (TNI).

# Charles B. Bott, PhD. P.E., Director of Water Technology and Research

Charles B. Bott Ph.D., P.E., BCEE, who joined HRSD in 2009, manages technology innovation for HRSD's wastewater treatment plants and collection system. Dr. Bott is also an Adjunct Professor in the Departments of Civil and Environmental Engineering at Virginia Tech and Old Dominion University. He was formerly an Associate Professor in the Department of Civil and Environmental Engineering at the Virginia Military Institute (VMI) and a consulting engineer with Parsons Engineering Science. technical interests include nutrient removal for both municipal and industrial wastewater treatment, as well as renewable energy generation in wastewater treatment and landfill applications. Dr. Bott also specializes in the treatment of unique chemical constituents in industrial wastewater applications by both physical-chemical and biological processes. He has specific expertise in the areas of chemical and biological phosphorus removal, denitrification with methanol and alternative carbon sources, nitrification kinetics and evaluation of nitrification inhibition, nutrient recovery, deammonification/anammox, and biogas conditioning. Dr. Bott has held multiple leadership and committee roles within the Water Environment Federation and served on numerous project oversight subcommittees for the Water Environment Research Foundation. His other professional affiliations include the International Water Association, where he has served as Secretary of the Nutrient Removal and Recovery Specialty Group. He also serves on the Science and Technical Advisory Committee to the Chesapeake Bay Program Executive Council. Dr. Bott has received the WEF Outstanding Young Professional Award and WEF's Harrison Prescott Eddy Medal as well as the American Society for Engineering Education Southeastern Section Outstanding New Professor Award, the Virginia Tech Outstanding Young Alumni Award, the VMI Thomas Jefferson Teaching Award, and the VMI Wilbur S. Hinman, Jr. '26 Research Award.

#### **Awards**

HRSD has received numerous awards for excellence in plant operations and maintenance, environmental engineering and design, and financial reporting. Its treatment plants have earned 291 awards for outstanding compliance with National Pollutant Discharge Elimination System ("NPDES") permits since 1986, when the recognition program was established. All 13 treatment plants qualified for an award for outstanding permit compliance for calendar year 2014, when the Army Base Treatment Plant achieved 28 consecutive years of perfect permit compliance, a record unmatched in the nation. During Fiscal Year 2013, HRSD received the prestigious Platinum Excellence in Management Award from the National Association of Clean Water Agencies (NACWA) and the Honor Award in the Environmental Sustainability category for "HRSD York River Treatment Plant Demon Sidestream Deammonification Process Implementation" from the American Academy of Environmental Engineers & Scientists (AAEES). In addition, HRSD received the American Council of Engineering Companies (ACEC) Grand Prize for research accomplished in partnership with DC Water. The U.S. Green Building Council awarded Silver Leadership in Energy and Environmental Design (LEED) Certification to HRSD's North Shore Operations Center, the Elizabeth River Project (ERP) recognized HRSD as a Sustained Distinguished Performance Model Level River Star business, and the Engineers Club of Hampton Roads named HRSD's Force Main Condition Assessment Program the 2013 Project of the Year. Honors received during Fiscal Year 2014 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 for 37 consecutive years, and the Hampton Roads Alliance for

Environmental Education (HRAEE) 2013 Increasing Communications Award. Also, Team HRSD placed first overall in the Division 2 Operations Challenge competition held during the 2013 Water Environment Federation Technical Exhibition and Conference (WEFTEC) and ERP recognized HRSD for a second consecutive year as a Sustained Distinguished Performance Model Level River Star business.

Honors received during Fiscal Year 2015 from NACWA included the Operations & Environmental Performance National Environmental Achievement Award (NEAA) for HRSD's Nutrient Removal Program: Advancement Through Management of Sidestream Loads initiative and the Research & Technology NEAA for the joint initiative with DC Water, Mainstream Deammonification—A New "Blue Print" for Cost Effective, Sustainable Nutrient Removal. The International Water Association presented HRSD and its project partners with the Project Innovation Honour Award for Applied Research for: Unlocking the Mysteries of Mainstream Deammonification – A Paradigm Shift for the Wastewater Industry. Also, Team HRSD placed first overall in the Division 2 Operations Challenge competition held during the 2014 WEFTEC and ERP presented HRSD with the Living Lafayette award.

#### THE SERVICE AREA

The District provides service to 558 square miles of existing sewered area and potentially 926 square miles based on Locality Comprehensive Plans out of the 2,808 square miles of land area within the boundaries of its corporate limits. The geographical limits are shown on the map behind the inside front cover and include the following localities:

City of Chesapeake Gloucester County City of Hampton Isle of Wight County City of Newport News James City County City of Norfolk King and Queen County City of Poquoson King William County City of Portsmouth **Mathews County** City of Suffolk Middlesex County City of Virginia Beach York County City of Williamsburg

The District and the Commission are independent of the localities served by the District. See "HAMPTON ROADS SANITATION DISTRICT—Authorization and Purpose" and "—The Commission."

As of the date of this Official Statement, HRSD is in discussions with Surry County about the potential to be added to the District's service area, but no agreement has been reached and no petitions have been filed in the Circuit Court as required in HRSD's Enabling Act to expand the service area. Surry County has an estimated 488 wastewater accounts.

## **Population Growth**

The area within the District has experienced substantial urban and suburban development and consequent population growth. The historical population and projections of future population within the District are presented below. Presently, the District contains approximately 21% of the population of the Commonwealth of Virginia.

| <u>Year</u> | <b>Population</b> <sup>(1)</sup> | <b>Population Increase</b> (%) <sup>(2)</sup> |
|-------------|----------------------------------|---|
| 1960        | 660,338                          |   |
| 1970        | 973,247                          | 47  |
| 1980        | 1,085,332                        | 12  |
| 1990        | 1,431,000                        | 32  |
| 2000        | 1,551,000                        | 8   |
| 2010        | 1,674,917                        | 8   |

<sup>(1)</sup> Source – United States Bureau of the Census.

The District's top ten ratepayers represented 9.7% of the District's total rate base, as measured by wastewater treatment charges, in Fiscal Year 2015. The following table compares the top ten ratepayers in Fiscal Year 2015 with the ten largest ratepayers in Fiscal Year 2006.

# Wastewater Treatment Charges <u>Ten Largest Customers</u>

|   |                                  | Fiscal Year 2015      |             | Fiscal Year 2006      |              |
|---|----------------------------------|-----------------------|-------------|-----------------------|--------------|
| <u>Customer</u>   | <u>Type</u>                      | Amount <sup>(1)</sup> | % of        | Amount <sup>(1)</sup> | % of         |
|   |                                  |                       | Total       |                       | Total        |
| U.S. Navy – Norfolk Naval Base                                    | Military Facility                | \$4,614               | 2.1         | \$1,857               | 1.7          |
| Smithfield Foods  | Meat Processor                   | 3,281                 | 1.5         | 2,036                 | 1.9          |
| Anheuser-Busch, Inc.  | Brewery                          | 3,240                 | 1.5         | 5,512                 | 5.2          |
| Norfolk Navy Shipyard   | Military Ship                    | 1,843                 | 0.8         | -                     | -            |
|   | Repair                           |                       |             |                       |              |
| City of Norfolk   | Municipality                     | 1,792                 | 0.8         | 1,072                 | 1.0          |
| Norfolk Redevelopment and Housing Authority                       | Housing<br>Authority             | 1,614                 | 0.7         | 589                   | 0.6          |
| Joint Expeditionary Base Little Creek – Fort Story <sup>(2)</sup> | Military Facility                | 1,606                 | 0.7         | 715                   | 0.7          |
| Huntington Ingalls Industries <sup>(3)</sup>                      | Shipbuilding                     | 1,288                 | 0.6         | 477                   | 0.4          |
| City of Virginia Beach  | Municipality                     | 1,164                 | 0.5         | -                     | -            |
| Sentara Healthcare  | Health Care<br>Network           | 1,076                 | 0.5         | -                     | -            |
| U.S Air Force – Langley   | Military Facility                | -                     | _           | 560                   | 0.5          |
| PEPSI-Cola Bottling   | Bottling Facility                | -                     | -           | 349                   | 0.5          |
| Marva Maid Dairy  | Manufacturer –<br>Dairy Products | -                     | -           | 346                   | 0.3          |
| Totals <sup>(4)</sup>   |                                  | <u>\$21,518</u>       | <u>9.7%</u> | <u>\$13,513</u>       | <u>12.6%</u> |

<sup>(1)</sup> Dollar amounts in thousands.

<sup>(2)</sup> Increase in population includes both increase in population within the District's original service area, as well as the expansion of the District's service area.

<sup>(2)</sup> Formerly U.S. Navy – Little Creek Amphibious Base.

<sup>(3)</sup> Formerly Northrop Grumman Newport News/Newport News Shipbuilding and Drydock.

<sup>(4)</sup> Totals may not add due to rounding.

#### **Wastewater Flow**

During the past five years, there has been population growth in the service area, while the number of service connections has remained relatively stable. Billed water consumption has declined modestly during such period because of conservation efforts on the part of utility customers fostered by increasing water rates, improved construction materials and the installation of low flow plumbing fixtures.

#### **Wastewater Flows and Service Connections**

| Fiscal Year<br>Ended June 30, | Average Daily<br><u>Wastewater Flow</u> <sup>(1)</sup> | Total Billed<br>Wastewater Flow <sup>(1,2)</sup> | Service Connections(3) |
|-------------------------------|--|--|------------------------|
| 2011                          | 144  | 119  | 457                    |
| 2012                          | 147  | 115  | 458                    |
| 2013                          | 158  | 112  | 460                    |
| 2014                          | 154  | 113  | 462                    |
| 2015                          | 152  | 112  | 465                    |

- (1) Millions of Gallons Per Day.
- (2) Water meters are read for billing purposes by the participating jurisdictions.
- (3) Number of service connections in thousands.

# **Expansion of Service Area**

In most instances, the routine expansion of the service area results from the extension of the interceptor system performed at the request of a local government. The general policy is that HRSD will extend an interceptor sewer when the local government extends a public water system. The interceptor sewer is intended to serve an area within two miles of the interceptor pipeline.

#### THE SYSTEM

The Wastewater System consists of nine major treatment plants (248.5 million gallons per day (MGD) capacity), four smaller plants and its interceptor system consisting of 83 major pump stations and approximately 532 miles of interceptors ranging in diameter from 6 to 66 inches. The interceptors, which are gravity and force mains, convey wastewater from the point of delivery by municipalities, industry and other users of the Wastewater System to the District's treatment plants.

The following table identifies the location of the District's major treatment plants, their design capacities and, for the Fiscal Year ended June 30, 2015, their average daily flows.

# Hampton Roads Sanitation District Treatment System Capacity & Flows (Million Gallons Per Day)

| Major<br><u>Treatment Facilities</u> | Average Design<br><u>Capacity</u> | FY 2015 Annual<br>Average Daily Flow |
|--------------------------------------|-----------------------------------|--------------------------------------|
| Army Base                            |                                   |                                      |
| Norfolk                              | 18.0                              | 9.9                                  |
| Atlantic                             |                                   |                                      |
| Virginia Beach                       | 54.0                              | 30.9                                 |
| Boat Harbor                          |                                   |                                      |
| Newport News                         | 25.0                              | 14.4                                 |
| Chesapeake-Elizabeth                 |                                   |                                      |
| Virginia Beach                       | 24.0                              | 16.3                                 |
| James River                          |                                   |                                      |
| Newport News                         | 20.0                              | 12.7                                 |
| Nansemond                            |                                   |                                      |
| Suffolk                              | 30.0                              | 16.6                                 |
| Virginia Initiative                  |                                   |                                      |
| Norfolk                              | 40.0                              | 30.5                                 |
| Williamsburg                         |                                   |                                      |
| James City County                    | 22.5                              | 8.4                                  |
| York River                           |                                   |                                      |
| York County                          | <u>15.0</u>                       | <u>12.6</u>                          |
|                                      |                                   |                                      |
| TOTALS                               | <u>248.5</u>                      | <u>152.2</u>                         |

In addition to the major facilities described above, the District operates four additional small wastewater treatment plants: two in Middlesex County with a combined capacity of 0.125 MGD, one in West Point (King William County) with a capacity of 0.60 MGD, and one in King William (King William County) with a capacity of 0.10 MGD. The interceptor system for these localities includes 33 pumping stations. On the Middle Peninsula, HRSD is responsible for collection, conveyance and treatment.

#### **System Improvements and Innovations**

HRSD has completed significant renewals and improvements to its treatment plants, pump stations, interceptor sewers, operational and administrative facilities in recent years. Electrical equipment upgrades throughout all HRSD facilities have been made to replace aging system components as well as meet new arc flash safety requirements. The on-going infrastructure renewal program has replaced a number of major interceptor pipelines and pump stations over the past few years including the Great Neck Road Interceptor Force Main in Virginia Beach, Normandy Lane Interceptor Force Main and Triton Court Pump Station in Newport News, and the Hampton 023 Pump Station and Force Main Replacement/Rehabilitation in Hampton.

HRSD has directed significant effort to meet new mass discharge limits on nitrogen and phosphorus as a result of the six state effort to restore the Chesapeake Bay. As a result of the capital projects at the York River, Nansemond and James River Treatment Plants, HRSD has met these new stringent limits since calendar year 2011, the first compliance deadline. Through the use of creative

design and phased construction, HRSD deploys cost-effective adaptive technologies to take advantage of the existing facilities and the diversity of treatment processes at each plant. There are over \$272 million in treatment plant improvements under construction at the Army Base and Virginia Initiative plants to meet the next Chesapeake Bay compliance deadline in 2017. Based on these investments, HRSD estimates that additional infrastructure improvements are not needed to meet the projected nutrient limits in 2022, unless the result of the Lower James River Chlorophyll Criteria Study requires more stringent water quality goals. The purpose of the Lower James River Chlorophyll Criteria Study is to provide a precise and scientifically defensible basis for the tidal James River nutrient allocations under the Chesapeake Bay total maximum daily load. The study seeks to identify the causes and consequences of algal blooms and develop models to estimate their occurrence by linking Chlorophyll *a* to nutrients and other environmental factors. In addition, the study will assess the impact of algal blooms on aquatic life and other water quality indicators. HRSD expects the study to be completed by 2017.

A comprehensive metering network has been installed throughout the Wastewater System to aid in optimizing system operations and to provide flow data to HRSD's new dynamic hydraulic model for calibration and validation purposes. The hydraulic model is one of the most sophisticated sewer modeling efforts in the country and is being used to guide placement and sizing of future system improvements to cost effectively address wet weather peak flows. In addition, HRSD uses the hydraulic model to evaluate new connections to the system to ensure capacity, size new pipelines and pump stations, develop contingency scenarios and improve system operational efficiency. The hydraulic model was also instrumental in HRSD's decision to take the Chesapeake-Elizabeth Treatment Plant offline and diverting flow to use available capacity at the Atlantic Treatment Plant. The 30-year net present value of savings expected to be realized from such decision is estimated to be between \$133 million to \$212 million.

HRSD owns the second Ostara nutrient recovery facility in the United States. The patented Ostara process recovers phosphorus and nitrogen from the wastewater treatment process, rather than releasing it into the Chesapeake Bay, and converts it to a slow release, high phosphorus content, commercial fertilizer.

The District continues to evaluate potential renewable energy projects, such as the Atlantic Treatment Plant Digester Gas Combined Heat and Power project completed in 2013. This project feeds internal combustion engines with treated digester gas to meet up to 40% of the 2.5 megawatt demand of the treatment plant and provide heating to the administration buildings and digesters. The digester gas treatment system uses a biological hydrogen sulfide gas scrubber, which is the first municipal installation in North America. In 2008, HRSD partnered with the Navy to use the Atlantic Treatment Plant's effluent to act as a heat sink for a large Navy facility located adjacent to the plant. This system, similar in function to a geothermal system, saves the Navy \$3 million per year and won a Federal Facility Presidential Award in 2009.

At the Atlantic Treatment Plant, HRSD is designing a new thermal hydrolysis process for biosolids handling. The process hydrolyzes and disintegrates sludge using pressure and temperature. As a result, biosolids are designated as Class "A," which means they are pathogen free and have far fewer land application restrictions, additional biogas is produced for the Combined Heat and Power system, and the process allows significant additional capacity to be gained from the existing anaerobic digesters. HRSD expects this project to be the second such installation in the United States.

The District is a leading agency in wastewater research and development. In collaboration with an international group of researchers and external partners, the District played a major role in patenting a process using mainstream external selectors to improve biomass settleability and stabilize biological phosphorus removal. This technology was installed at the James River Treatment Plant in 2015 and will be installed in one train at the Urbanna Treatment Plant in 2016. In addition, the District is partnered with

an international group of agencies and academic institutions studying a revolutionary wastewater process using a relatively new bacteria called Anammox. The District started operating the first two full-scale sidestream treatment processes using Anammox in the Western Hemisphere at York River Treatment Plant and James River Treatment Plant. HRSD developed and patented (pending) a new control system for one of those processes known as the AnitaMox process. HRSD, in collaboration with others, patented a suite of technologies associated with the treatment of nitrogen using low energy, low carbon, and intensified (smaller tanks) processes and based on mainstream nitrite shunt and deammonification (anammox). This technology suite is known as "AVN" and has been commercialized through a competitive process with World Water Works, Inc. HRSD installed this control system at the Boat Harbor Treatment Plant with significant improvements in nitrogen removal performance at very low cost.

The District is also investigating other innovative projects to reduce energy usage and limit the discharge of contaminants to the environment. The District is using ammonia-based aeration control at two plants to improve nutrient removal while reducing energy, alkalinity, hypochlorite and supplemental carbon demand. There are only a few plants in the United States using this control strategy.

#### **Capital Improvement Program**

The District's Capital Improvement Program is designed to meet regulatory requirements, including both nutrient reduction and sanitary sewer overflow reduction, aging infrastructure renewals and replacements, biosolids management and increased capacity. The District uses a ten-year planning horizon for the CIP. The CIP is updated each year and modified as circumstances dictate. The Commission approves the overall program and the first year of the plan and appropriates funds on an individual project basis. The District also utilizes a CIP project prioritization program using a decision-analysis based process. This process allows each proposed project to be considered objectively against the merits of other proposed projects to ensure the right project is completed at the right time. Individual projects are scored using performance measures based on ten criteria and ranked. After the CIP review team considers each project score for consistency, the CIP leadership team makes final decisions on project acceptability and develops a prioritized project schedule based on projected capital funding availability.

The 2016-2025 CIP includes approximately \$1.45 billion in interceptor system, treatment plant and other facility improvements. Of that total, \$158 million is identified for the rehabilitation and upgrade of wastewater treatment plants. A number of interceptor sewer projects, totaling approximately \$354 million are in the planning, design or construction phase. These planned projects are proposed to address aging infrastructure issues within the extensive District interceptor sewer piping system. Upgrades to aging sewer pump stations and new pump stations to serve Hampton Roads are an important part of the CIP with over \$214 million of such improvements planned in the next ten years. The CIP includes \$44 million in anticipated biosolids management improvements.

The District will play a critical role in assisting the localities it serves to address the region's sanitary sewer overflow reduction program as mandated by the Consent Decree (as defined herein). As part of this effort, the District has implemented a significant regional interceptor sewer metering program, a hydraulic sanitary sewer computer model and a sanitary sewer evaluation study to develop a Regional Wet Weather Management Plan ("RWWMP"). In 2011, the District worked with the localities to develop a private property inflow and infiltration program as required by the Consent Decree. This program will reduce inflow and infiltration coming from private house laterals as well as commercial property. The CIP includes over \$855 million to be spent in the next ten years to comply with the Consent Decree. See "—State Consent Agreement, EPA Consent Decree and Regionalization" below.

The following table sets forth the District's anticipated sources of funds for its Capital Improvement Plan in Fiscal Years 2016 through 2020.

# CIP, Fiscal Years 2016 to 2020 (dollar amounts in thousands) (as of Fiscal Years ended June 30)(1)

|                                 |                  |                  |                  |                  |                  | Total            |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                 | <u>2016</u>      | <u>2017</u>      | <u>2018</u>      | <u>2019</u>      | <u>2020</u>      | (2016-20)        |
| Capital Reserves <sup>(2)</sup> | \$32,632         | -                | -                | -                | -                | \$ 32,632        |
| Debt Funded <sup>(3)</sup>      | 68,085           | \$59,679         | \$53,500         | \$70,163         | \$89,072         | 340,499          |
| Cash                            | 39,983           | 49,521           | 54,000           | 54,837           | 52,528           | 250,869          |
| Grants and Other Reimbursements | 14,300           | 10,800           | 12,500           | <u>-</u>         | 1,900            | 39,500           |
| Total Sources                   | \$155,000        | \$120,000        | \$120,000        | \$125,000        | \$143,500        | \$663,500        |
| Capital Expenditures            | <u>\$155,000</u> | <u>\$120,000</u> | <u>\$120,000</u> | <u>\$125,000</u> | <u>\$143,500</u> | <u>\$663,500</u> |

<sup>(1)</sup> Totals may not add due to rounding.

The District plans to fund the Capital Improvement Program through a combination of cash and debt financing as shown in the above table. The CIP also includes \$784 million in funding in Fiscal Years 2021 through 2025, of which \$302 million is planned to be funded with debt proceeds and \$454 million with operating cash, and \$28 million through reserves and other reimbursements.

In addition to its ten-year planning horizon, the District undertakes preliminary planning for its CIP through 2035. While subject to change, the District estimates additional capital expenditures of \$3.0 billion for years 2026-2035, with approximately half to be financed with new debt. Capital expenditures include estimated costs associated with the RWWMP discussed under "State Consent Agreement, EPA Consent Decree and Regionalization" below.

#### **Regulation and Permits**

The Virginia State Water Control Law (Chapter 3.1, Title 62.1, Code of Virginia, 1950, as amended) provides that the plans and specifications for wastewater facilities to be constructed be approved by the Virginia Department of Health and the Virginia Department of Environmental Quality. The District operates all of its plants and interceptor systems under permits issued by the Virginia Department of Environmental Quality.

Except as described under "—State Consent Agreement, EPA Consent Decree and Regionalization" and described under "—System Improvements and Innovations" above relating to the Lower James River Chlorophyll Criteria Study, the District is not aware of any pending federal or state regulatory requirements that would require significant expenditures for additional capital improvements; however, the District cannot predict the scope or effect of future federal or Commonwealth regulatory actions that could require significant expenditures for capital improvements.

#### State Consent Agreement, EPA Consent Decree and Regionalization

In September 2007, the Commonwealth entered into a regional consent agreement (the "2007 Consent Agreement") with the District and 13 of the localities that it serves. The Consent Agreement required flow monitoring, sewer investigations, rehabilitation planning and preparation of a Regional Wet

<sup>(2)</sup> Represents initial balance.

<sup>(3)</sup> Includes unexpended Bond proceeds.

Weather Management Plan. HRSD and the localities fully complied with the requirements of the 2007 Consent Agreement until it was terminated in 2014 and replaced with a new agreement.

On December 19, 2014, the Commonwealth of Virginia entered into a new, long-term Consent Agreement (the "2014 Consent Agreement") with 14 of the localities that HRSD serves. The 2014 Consent Agreement requires the localities to perform long-term management, operations and maintenance of their sewer systems in support of HRSD's efforts to provide long-term regional wet weather wastewater capacity. HRSD is not a party to the 2014 Consent Agreement. Instead, HRSD's obligations are now solely imposed through its federal consent decree.

Separately, HRSD continues to implement a federally enforceable consent decree (the "Consent Decree") that it entered into with the United States Environmental Protection Agency ("EPA") and the Commonwealth. The Consent Decree was entered by the federal district court for the Eastern District of Virginia (the "District Court") on February 23, 2010. The Consent Decree has been amended three times, most recently on August 24, 2014 (the "Amended Consent Decree").

The Amended Consent Decree has two major operative requirements. First, it carries forward the requirement of the 2007 Consent Agreement to develop a Regional Wet Weather Management Plan ("RWWMP") to control capacity related sewer overflows. However, through the third amendment, HRSD has now assumed responsibility for planning (in consultation with the 14 affected localities), designing, funding, and implementing the controls in both the Localities' systems and the HRSD system that will be contained in the approved RWWMP. Through this approach, HRSD estimates the regional ratepayers will achieve significantly reduced program costs than if each locality sought to address peak wet weather wastewater flows on its own. To facilitate these regional cost savings, the Amended Consent Decree extends the RWWMP submittal deadline one year to October 1, 2017. To further facilitate this approach, the 14 affected localities entered into a Memorandum of Agreement with HRSD in 2014 in which they agree to (1) cooperate with HRSD, (2) facilitate the construction of and accept ownership of any improvements which HRSD may need to construct in the localities' systems, and (3) maintain the integrity of their systems to industry standards.

The Amended Consent Decree also revised the requirement for the District to implement a portion of its current ten-year Capital Improvement Plan. The initial requirement covered 33 projects totaling approximately \$140 million to be completed by February 23, 2018. The Third Amended Consent Decree made two categories of changes to this requirement. First, it authorized the removal of six projects in return for the addition of approximately 18 projects. These 18 projects added approximately \$23 million to the original cost estimate. Second, HRSD also added to the required projects its ongoing commitment to upgrade its Virginia Initiative Plant ("VIP") to add nutrient removal technology required under the Chesapeake Bay Program. The VIP plant upgrade adds approximately \$143 million to the total cost of the projects which are now subject to the Amended Consent Decree. In adding the Virginia Initiative plant, the Amended Consent Decree specified December 31, 2018 as the substantial completion deadline, consistent with HRSD's existing legal obligation to complete the VIP plant nutrient upgrade. In total, the revised Interim System Improvements required in the Amended Consent Decree specify a total of \$306 million in projects to be completed by February 23, 2018 (except for the VIP plant upgrade which must be completed by December 31, 2018). HRSD is on track to timely implement all of the Interim System Improvements identified in the Amended Consent Decree, which are a subset of HRSD's ten-year Capital Improvement Plan.

As noted, the Amended Consent Decree requires HRSD to evaluate the wet weather capacity of the regional sewer system, including those collection systems owned by 14 of the localities that HRSD serves in the Hampton Roads area. Based upon that evaluation, HRSD, in consultation with the localities, is required to develop the RWWMP for submittal by October 1, 2017, to the federal and Commonwealth environmental agencies for their approval. The recommended plan will include an implementation

schedule. The RWWMP will identify the attainable level of wet weather capacity in the Regional Sanitary Sewer System. The RWWMP will also summarize the major projects and programs that must be implemented in order to achieve the specified level of regional wet weather capacity. It is likely that the RWWMP will call for approximately \$2 billion in infrastructure investments across the Hampton Roads region over several decades. See "— Capital Improvement Program" above for certain costs the District has included in the CIP for RWWMP projects.

#### FINANCIAL MANAGEMENT

#### General

Through its annual budget process, management seeks to ensure that operating revenues are sufficient to meet operating expenditures and sufficient reserves are available in the event actual billings do not meet budget estimates. The construction of new plants and extension of the interceptor system are financed by a combination of operating revenues and debt financing. The following table sets out the District's operating results and debt service coverage for the Fiscal Years ended June 30, 2011, through June 30, 2015.

#### Summary of Operating Expenses and Debt Service Coverage (Dollar Amounts in Thousands) (as of Fiscal Years ended June 30)<sup>(1)</sup>

|   | <u>2015</u>            | <u>2014</u>         | <u>2013</u> <sup>(2)</sup> | <u>2012</u> <sup>(2)</sup> | <u>2011</u>              |
|---|------------------------|---------------------|----------------------------|----------------------------|--------------------------|
| Operating Revenues                            | <b></b>                | <b>***</b> ******** |                            | ****** <b>*</b>            | <b>4.02 7.2</b> <i>5</i> |
| Wastewater Treatment Charges                  | \$221,626              | \$211,538           | \$199,318                  | \$194,817                  | \$183,526                |
| Miscellaneous                                 | 3,935<br>\$225,561     | 3,643               | 3,297<br>\$202,615         | 2,996<br>\$107,812         | 3,890<br>\$197,416       |
| <b>Total Operating Revenues</b>               | <u>\$225,561</u>       | <u>\$215,181</u>    | <u>\$202,615</u>           | <u>\$197,813</u>           | <u>\$187,416</u>         |
| Non-Operating Revenues (Expenses),            |                        |                     |                            |                            |                          |
| excluding capital grants received             |                        |                     |                            |                            |                          |
| Wastewater Facility Charges                   | \$7,428                | \$6,640             | \$5,851                    | \$6,276                    | \$5,083                  |
| Investment Earnings                           | 1,695                  | 1,872               | 1,705                      | 1,681                      | 1,699                    |
| Bond Interest Subsidy <sup>(3)</sup>          | 2,444                  | 2,364               | 2,602                      | 2,602                      | 2,602                    |
| Disposal of Capital Assets                    | -                      | -                   | (1,649)                    | -                          | -                        |
| Bond Issue Costs                              | (768)                  | -                   | (658)                      | (2,206)                    | -                        |
| Change in Fair Value of                       | (20.6)                 | (422)               | (714)                      | (224)                      | (10)                     |
| Investments                                   | (286)                  | <u>(422)</u>        | <u>(714)</u>               | (224)                      | (19)                     |
| <b>Total Non-Operating Revenues</b>           | <u>\$10,513</u>        | <u>\$10,454</u>     | <u>\$7,137</u>             | <u>\$8,129</u>             | <u>\$9,365</u>           |
| <b>Total Revenues</b>                         | <u>\$236,074</u>       | <u>\$225,635</u>    | <u>\$209,752</u>           | <u>\$205,942</u>           | <u>\$196,781</u>         |
| Operating Expenses, Excluding                 |                        |                     |                            |                            |                          |
| Depreciation                                  | 152,815 <sup>(5)</sup> | 142,161             | <u>141,390</u>             | 141,946                    | 131,847                  |
| Net Revenues                                  | <u>\$83,259</u>        | <u>\$83,474</u>     | <u>\$68,362</u>            | <u>\$63,996</u>            | <u>\$64,934</u>          |
|   | <b>0.4.4.02</b>        | <b>4.7.00</b> 0     | <b>***</b>                 | <b>#22.002</b>             | <b>#</b> 20.255          |
| Total Senior Obligations Debt Service         | \$44,937               | \$47,220            | \$37,574                   | \$33,082                   | \$28,275                 |
| Coverage on Senior Obligations <sup>(4)</sup> | 1.85                   | 1.77                | 1.82                       | 1.93                       | 2.30                     |
| Total Senior Obligations and Parity           |                        |                     |                            |                            |                          |
| Obligations Debt Service                      | \$57,465               | \$59,739            | \$48,823                   | \$46,777                   | \$38,952                 |
| Coverage on Senior Obligations and            | Ψ57,π05                | Ψυν,1υν             | ψτυ,023                    | Ψτυ,///                    | Ψ30,732                  |
| Parity Obligations <sup>(4)</sup>             | 1.45                   | 1.40                | 1.40                       | 1.37                       | 1.67                     |

<sup>(1)</sup> Revenues and Operating Expenses are presented in accordance with generally accepted accounting principles. Debt Service presented on a cash basis (i.e., debt service actually due during the related Fiscal Year).

<sup>(2)</sup> Effective July 1, 2012, HRSD adopted GASB Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position ("GASB 63") and GASB Statement No. 65, Items Previously Reported as Assets and Liabilities ("GASB 65"). These statements require reporting of deferred outflows and inflows of resources separately from assets and liabilities and replace net assets with net position. In addition, certain items previously reported as assets and liabilities are now recognized as outflows or inflows of resources. Other than these changes and renaming net assets with net position, GASB 63 had no impact on the District's financial position or results of operation. To implement GASB 65, unamortized bond issuance costs were expensed and applied retroactively by restating the prior period financial statements.

<sup>(3)</sup> Actual Build America Bonds subsidy received from the federal government relating to interest on the Series 2009B Bonds.

<sup>(4)</sup> Calculated based on actual debt service payable on a current year basis.

<sup>(5)</sup> Effective July 1, 2015, HRSD adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions and GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date.

For purposes of the Senior Trust Agreement, the Liquidity Ratio is the resulting dividend of unrestricted cash divided by the Maximum Annual Debt Service on Senior Obligations. Unrestricted cash includes "... cash, cash equivalents and marketable securities that do not constitute Restricted Funds held by the District for its various purposes, but not including cash, cash equivalents and securities which constitute proceeds of Indebtedness issued to finance capital improvements or funds held in the Bond Fund for Senior Obligations (or any similar sinking fund held by a trustee for the payment of Indebtedness) or the Debt Service Reserve Fund." The Senior Trust Agreement requires that the District maintain a minimum Liquidity Ratio of 1.35 or fund the Debt Service Reserve Fund at the Debt Service Reserve Fund Requirement. The following table reflects the Liquidity Ratio for Fiscal Years 2011 to 2015. Amounts held in the Debt Service Reserve Fund for the Senior Obligations are not security for the Subordinate Obligations.

#### Historical Liquidity Ratio (dollar amounts in thousands) (as of Fiscal Years ended June 30)

| Cash and Cash Equivalents Investments – Current                | 2015<br>\$7,825<br>19,926 | 2014<br>\$37,924 | 2013<br>\$38,355<br>5,569 | 2012<br>\$34,767<br>8,583 | 2011<br>\$37,130<br>15,527 |
|--|---------------------------|------------------|---------------------------|---------------------------|----------------------------|
| Investments - Non-Current                                      | <u>101,649</u>            | <u>111,861</u>   | <u>108,721</u>            | <u>95,140</u>             | <u>72,727</u>              |
| Total Cash, Cash Equivalents and<br>Investments – Unrestricted | \$129,400                 | \$149,785        | \$152,645                 | \$138,490                 | \$125,384                  |
| Cash and Cash Equivalents – Restricted                         | 86,451                    | 139,257          | 179,588                   | 88,444                    | 76,625                     |
| Investments – Current - Restricted                             | -                         | 8,600            | -                         | -                         | -                          |
| Total Cash, Cash Equivalents and                               |                           |                  |                           |                           |                            |
| Investments*   | <u>\$215,851</u>          | <u>\$297,642</u> | <u>\$332,233</u>          | <u>\$226,934</u>          | <u>\$202,009</u>           |
| Maximum Annual Debt Service†                                   | \$57,807                  | \$59,776         | \$60,114                  | \$52,420                  | \$48,231                   |
| Liquidity Ratio<br>Required Liquidity Ratio†                   | 2.24<br>1.35              | 2.51<br>1.35     | 2.54<br>1.35              | 2.64<br>1.35              | 2.60<br>1.35               |

<sup>\*</sup> Includes amounts set aside pursuant to the Senior Trust Agreement and Subordinate Trust Agreement for debt service.

<u>Pension Fund and Other Post-Retirement Benefits</u>. For a description of the District's participation in the Virginia Retirement System, a defined benefit plan offered by the Commonwealth of Virginia, and of the post-retirement health benefits for qualifying employees of the District, see the District's Comprehensive Annual Financial Report attached as Appendix A hereto.

<u>Debt Management</u>. The Commission has adopted a comprehensive financial policy designed to promote sound financial management. The policy addresses, but is not limited to the following areas:

<sup>†</sup> Ratio to be maintained without triggering requirement under the Senior Trust Agreement to fund the Debt Service Reserve Fund for Senior Bonds. Debt service is calculated in accordance with the Senior Trust Agreement calculation of the Liquidity Ratio, which includes adjustments for Balloon Long-Term Indebtedness and Variable Rate Long-Term Indebtedness.

reserves, budgetary principles and controls, debt affordability, debt management, risk management, derivatives and investments. The Commission has the right to change the financial policy from time to time.

The policy requires minimum debt service coverage requirements in excess of its obligations under the Trust Agreement. It also requires cash contributions to its capital program of not less than 15% of each year's capital improvement program. Additionally, the policy establishes parameters for the investment of idle funds.

<u>Projected Operating Results</u>. The following table shows projected Revenues and Current Expenses for the Fiscal Years ending June 30, 2016, through June 30, 2020, inclusive.

# Summary of Projected Revenues and Current Expenses (Dollar Amounts in Thousands) (as of Fiscal Years ended June 30)(1)

|   | 2016             | 2017             | 2018             | 2019             | 2020             |
|---|------------------|------------------|------------------|------------------|------------------|
| Operating Revenues  | \$230,750        | \$241,058        | \$252,835        | \$272,401        | \$293,500        |
| Non-Operating Revenues                                    | 10,890           | 12,401           | 13,370           | 13,466           | 14,086           |
| Operating Expenses Excluding Depreciation                 | <u>(158,407)</u> | <u>(157,147)</u> | <u>(160,557)</u> | <u>(176,573)</u> | <u>(203512)</u>  |
| Net Revenues  | <u>\$83,233</u>  | <u>\$96,312</u>  | <u>\$105,648</u> | <u>\$109,294</u> | <u>\$104,074</u> |
| Expenses on Assets not Owned by HRSD                      | (2,000)          | Ξ                | Ξ                | (13,402)         | (30,370)         |
| Net revenues Less Expenses on Assets not<br>Owned by HRSD | \$85,233         | \$96,312         | \$105,648        | \$122,697        | \$134,444        |
| Senior Obligation Debt Service                            | \$43,419         | \$35,425         | \$37,718         | \$37,330         | \$37,270         |
| Total Debt Service <sup>(2)</sup>                         | \$54,804         | \$58,806         | \$58,782         | \$58,392         | \$58,334         |
| Total Debt Service Coverage Ratio <sup>(2)</sup>          | 1.56             | 1.64             | 1.80             | 2.10             | 2.30             |
| Key Assumptions <sup>(3)</sup>                            |                  |                  |                  |                  |                  |
| Rate Increases  | 8%               | 6%               | 6%               | 9%               | 9%               |
| Miscellaneous Revenue Growth                              | 3%               | 3%               | 3%               | 3%               | 3%               |
| Decline in Consumption                                    | -1%              | -1%              | -1%              | -1%              | -1%              |
| Key Inflation Trends                                      |                  |                  |                  |                  |                  |
| Average Inflation   | _                | 5%               | 5%               | 5%               | 5%               |
| Personal Services and Employment Benefits                 | _                | 4%               | 4%               | 4%               | 4%               |
| Utilities/Chemicals/Contractual Services                  | -                | 4%               | 4%               | 4%               | 4%               |
| Bond Issuance   | \$150,000(4)     | -                | \$125,000        | -                | \$125,000        |

<sup>(1)</sup> Totals may not add due to rounding.

#### **Budgeting and Accounting**

<u>Budgetary Controls</u>. The District adopts an annual operating budget and a 10-year Capital Improvement Plan. The budget is approved on or before June 30 of each year. The District maintains budgetary controls on a departmental basis. With the exception of capital projects, unused fund

<sup>(2)</sup> Includes debt service on the new money projects financed with the proceeds of the Series 2016A and Series 2016B Bonds (in the case of the Series 2016B Bonds, at an assumed interest rate of 1.88%).

<sup>(3)</sup> While the District believes the assumptions set forth above are reasonable, actual results may vary.

<sup>(4)</sup> Projected Project Fund deposit from proceeds of Series 2016A Bonds and Series 2016B Bonds and amounts drawn on the Line of Credit and refinanced with proceeds of the Series 2016A Bonds.

appropriations lapse at year end. As part of the budget process, the District adopts a long-range financial forecast.

<u>Financial Statements</u>. In accordance with accounting principles generally accepted in the United States, the District's audited general purpose financial statements are prepared on an accrual basis of accounting. The District's audited basic financial statements, and the report thereon by KPMG LLP, for the Fiscal Year ended June 30, 2015, are included in Appendix A. The District's independent auditor, KPMG LLP, has not been engaged to perform and has not performed, since the date of its report included in Appendix A, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this Official Statement.

The Government Finance Officers Association of the United States and Canada has awarded a Certificate of Achievement for excellence in Financial Reporting to the District for its comprehensive annual financial reports for 32 consecutive Fiscal Years. The District will submit its report for the Fiscal Year ended June 30, 2015, and expects to receive another Certificate of Excellence. In order to be awarded a Certificate of Excellence, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

#### Rates

The District periodically reviews its rate structure and revises its charges as necessary to generate the revenues required to meet its current financial obligations. The most recent general increase in rates became effective July 1, 2015. The District's full rate schedule as of July 1, 2015, can be found in the District's Comprehensive Annual Financial Report attached as Appendix A hereto.

The District's typical residential customer pays less than \$27 per month for sewage interception and treatment services provided by the District. The District's sewage interception and treatment charge generally is the smallest public service utility bill its customers receive. Generally, the District bills and collects directly from its customers on a monthly, bimonthly, or quarterly basis depending upon the community. The jurisdictions provide the first point of customer contact and appropriate meter readings, which are the basis of the District's billing operation.

Effective July 1, 2012, the District began the process of restructuring its surcharge rates to reflect the incremental cost the District incurs to treat surcharge pollutants discharged by certain industrial customers. This incremental rate structure was fully implemented effective July 1, 2014. Other costs the District incurs to treat normal sewage concentrations from industrial and residential customers are recovered through the District's volumetric rate.

The District provides billing and cashiering services to several of the jurisdictions it serves, including Chesapeake, James City County, Norfolk, Smithfield and Suffolk. The combined bill can include jurisdictional charges for water, solid waste disposal, sewage collection, storm water mitigation and District charges for sewage interception and treatment. To date these services have been provided at minimum cost to assist the jurisdictions and customers the District serves to minimize the number of bills the customers receive and number of payments they need to make.

#### **Rate Making Process**

The Enabling Act provides that the Commission is to fix and revise rates, fees and charges to provide funds that, with other funds available for such purposes, will be sufficient at all times (a) to pay the cost of maintaining, repairing and operating the Wastewater System and all improvements thereto,

including reserves for such purpose and for renewals and replacements and necessary extensions and additions to the Wastewater System, (b) to pay the principal of and the interest on such revenue bonds as the same shall become due and to provide reserves therefor, and (c) to provide a margin of safety for making such payments.

The Enabling Act provides that before any revision of rates, fees and charges shall become effective the Commission shall publish a copy thereof for four consecutive weeks in a newspaper of general circulation within the District. If, on or before the last publication, the governing body of any city or county constituting a part of the District or five hundred or more qualified voters residing within the District file a petition with the Virginia State Corporation Commission complaining of the proposed revision, the State Corporation Commission may by order suspend the placing in effect of such revision for a period not exceeding sixty days from the filing of any such petition during which time it shall investigate whether such revision is just and equitable and in accordance with the provisions of the Enabling Act. If the State Corporation Commission does not enter an order suspending, approving or disapproving such revision within sixty days from the filing of any such petition, such revision will be deemed to be in effect. The District or the party or parties filing a petition may appeal to the Supreme Court of Virginia from any such order as may be entered by the State Corporation Commission.

#### **Collection of Unpaid Wastewater Treatment Charges**

The Enabling Act provides that if any bill for wastewater treatment charges is not paid in full when the same becomes due, the owner, tenant or occupant of such lot or parcel of land shall, until wastewater treatment charges are paid, cease to dispose of wastewater or industrial wastes originating from or on such property by discharge thereof directly or indirectly into the Wastewater System, and if such owner, tenant or occupant does not cease such discharge within two months thereafter, it shall be the duty of each public or private agency supplying water to such property, within five days after receipt of notice of such facts from the District, to cease supplying water to such property. If the water supply is not stopped, the District has the power to enter into any public or private property to shut off the property's water supply.

If any wastewater treatment charges are not paid within 30 days after the same become due, the District may at the expiration of such 30-day period proceed to recover the amount of any such delinquent sewage treatment charges by any action, suit or proceeding permitted by law or in equity.

The District participates in the Virginia Set-Off Debt Collection Program administered by the Virginia Department of Taxation. This program provides a means for government units and courts to collect delinquent debts by attaching individual income tax refunds and certain state lottery winnings. Jurisdictions participating in the Hampton Roads Utility Billing Service (which is managed by the District) may have the District submit their balances along with the District's. This benefits the jurisdictions since, under the Debt Set-Off Collection Program, the District has a higher payoff priority than counties and cities. The following table shows the District's treatment charge collection rate for the last ten Fiscal Years.

#### Hampton Roads Sanitation District Collection Rate

| Fiscal Year Ended June 30, | Percentage of Wastewater Treatment <u>Charges Collected</u> |
|----------------------------|---|
| 2006                       | 98.6%   |
| 2007                       | 97.2  |
| $2008^{(1)}$               | 93.2  |
| 2009                       | 96.5  |
| 2010                       | 99.2  |
| 2011                       | 98.8  |
| 2012                       | 99.1  |
| 2013                       | 99.3  |
| 2014                       | 99.3  |
| 2015                       | 99.1  |
|                            |   |

<sup>(1)</sup> During Fiscal Year 2008, HRSD installed a new customer billing system which resulted in the removal of certain duplicative and dormant accounts. This resulted in a one-time decline in the collection rate.

#### LITIGATION

There is no litigation pending in any court (either state or federal) or, to the knowledge of the District, threatened against the District that in any way questions or affects the validity of or the security for the Series 2016A Bonds, or that would have a material adverse effect on the District's condition, financial or otherwise.

#### APPROVAL OF LEGAL PROCEEDINGS

The Series 2016A Bonds are offered subject to the approving opinion of Sidley Austin LLP, Washington, D.C., Bond Counsel. Certain legal matters will be passed upon for the District by its General Counsel, Kellam, Pickrell, Cox, Tayloe & Anderson, A Professional Corporation, Norfolk, Virginia, and for the Underwriters by Kaufman & Canoles, P.C., Norfolk, Virginia.

#### TAX MATTERS

#### General

In the opinion of Sidley Austin LLP, Bond Counsel, assuming compliance by the District with its covenant to comply with the requirements of the Internal Revenue Code of 1986, as amended (the "Code"), with respect to the Series 2016A Bonds, and except as provided in the following sentence, interest on the Series 2016A Bonds will not be includable in the gross income of the owners of the Series 2016A Bonds for purposes of federal income taxation under existing law. Interest on the Series 2016A Bonds will be includable in the gross income of the owners thereof retroactive to the date of issue of the Series 2016A Bonds in the event of a failure by the District to comply with applicable requirements of the Code and its covenants regarding use, expenditure and investment of the proceeds of the Series 2016A Bonds and timely payment of certain investment earnings to the United States Treasury. Bond Counsel

renders no opinion as to the exclusion from gross income of the interest on the Series 2016A Bonds for federal income tax purposes on or after the date on which any action is taken or not taken affecting such covenants upon the approval of counsel other than Bond Counsel.

Interest on the Series 2016A Bonds will not be a specific preference item for purposes of the federal individual or corporate alternative minimum tax. Such interest will, however, be included in the calculation of the federal alternative minimum tax liability imposed on corporations by the Code. The Code contains other provisions that could result in tax consequences, as to which Bond Counsel renders no opinion, as a result of ownership of the Series 2016A Bonds or the inclusion in certain computations (including, without limitation, those related to the corporate alternative minimum tax) of interest that is excluded from gross income.

#### **Original Issue Discount**

The excess, if any, of the amount payable at maturity of any maturity of the Series 2016A Bonds over the issue price thereof constitutes original issue discount. The amount of original issue discount accrues in accordance with a constant yield method based on the compounding of interest. The amount of original issue discount that has accrued pursuant to the constant yield method described above, and is properly allocable to an owner of any maturity of the Series 2016A Bonds with original issue discount (the "Discount Bonds"), will be excluded from gross income to the same extent as interest on the Series 2016A Bonds for federal income tax purposes. In general, the issue price of a maturity of the Series 2016A Bonds is the first price at which a substantial amount of that maturity was sold (excluding sales to bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers). A purchaser's adjusted basis in a Discount Bond will be increased by the amount of such accruing discount for purposes of determining taxable gain or loss on the sale or other disposition of such Discount Bond for federal income tax purposes.

A portion of the original issue discount that accrues in each year to an owner of a Discount Bond that is a corporation will be included in the calculation of the corporation's federal alternative minimum tax liability. In addition, original issue discount that accrues in each year to an owner of a Discount Bond will be included in the calculation of the distribution requirements of certain regulated investment companies and may result in some of the collateral federal income tax consequences discussed herein. Consequently, owners of any Discount Bond should be aware that the accrual of original issue discount in each year may result in an alternative minimum tax liability, additional distribution requirements or other collateral federal income tax consequences although the owner of such Discount Bond has not received cash attributable to such original issue discount in such year.

The accrual of original issue discount and its effect on the sale or other disposition of a Discount Bond that is not purchased in the initial offering at the first price at which a substantial amount of Discount Bonds of that maturity is sold to the public may be determined according to rules that differ from those described above. Owners of Discount Bonds should consult their tax advisors with respect to the determination for federal income tax purposes of the amount of original issue discount or interest properly accruable with respect to such Discount Bonds and with respect to state and local tax consequences of owning and disposing of such Discount Bonds.

#### **Original Issue Premium**

The excess, if any, of the tax basis of the Series 2016A Bonds to a purchaser (other than a purchaser who holds such Series 2016A Bonds as inventory, stock in trade or for sale to customers in the ordinary course of business) who purchased such Series 2016A Bonds as part of the initial public offering and at the initial offering price set forth on the cover page over the amount payable at maturity is "bond

premium." Bond premium is to be amortized over the term of such Series 2016A Bonds for federal income tax purposes (or, in the case of a bond with bond premium callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on such bond). Owners of such Series 2016A Bonds are required to decrease their adjusted basis in such Series 2016A Bonds by the amount of amortizable bond premium attributable to each taxable year such Series 2016A Bonds are held. The amortizable bond premium on such Series 2016A Bonds attributable to a taxable year will not be deductible for federal income tax purposes; however, bond premium will be treated as an offset to qualified stated interest received on such Series 2016A Bonds. Owners of such Series 2016A Bonds should consult their tax advisors with respect to the determination for federal income tax purposes of the treatment of bond premium upon sale or other disposition of such Series 2016A Bonds and with respect to the state and local tax consequences of owning and disposing of such Series 2016A Bonds.

#### **Backup Withholding**

Interest paid on the Series 2016A Bonds is subject to information reporting in a manner similar to interest paid on taxable obligations. While this reporting requirement does not, by itself, affect the excludability of interest from gross income for federal income tax purposes, the reporting requirement causes the payment of interest on the Series 2016A Bonds to be subject to backup withholding if such interest is paid to beneficial owners that (a) are not "exempt recipients," and (b) either fail to provide certain identifying information (such as the beneficial owner's taxpayer identification number) in the required manner or have been identified by the IRS as having failed to report all interest and dividends required to be shown on their income tax returns. Generally, individuals are not exempt recipients, whereas corporations and certain other entities are exempt recipients. Amounts withheld under the backup withholding rules from a payment to a beneficial owner are allowed as a refund or credit against such beneficial owner's federal income tax liability so long as the required information is furnished to the IRS.

#### **Collateral Tax Consequences**

Prospective purchasers of the Series 2016A Bonds should be aware that the ownership of tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, certain foreign corporations doing business in the United States, certain S corporations with excess passive income, individual recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations and taxpayers who may be eligible for the earned income tax credit. Prospective purchasers of the Series 2016A Bonds should consult their tax advisors as to the applicability and impact of these consequences.

#### Virginia Taxes

The Enabling Act provides that the Series 2016A Bonds, their transfer and the income therefrom, including any profit made on the sale thereof, shall be free and exempt from taxation by the Commonwealth of Virginia and by any political subdivision thereof.

#### **Future Developments**

Future legislative proposals, if enacted, regulations, rulings or court decisions may cause interest on the Series 2016A Bonds to be subject, directly or indirectly, to federal income taxation or to Commonwealth of Virginia or local income taxation, or may otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. Legislation or regulatory actions and

future or pending proposals may also affect the economic value of the federal or Commonwealth of Virginia tax exemption or the market value of the Series 2016A Bonds. Prospective purchasers of the Series 2016A Bonds should consult their tax advisors regarding any future, pending or proposed federal or Commonwealth of Virginia tax legislation, regulations, rulings or litigation as to which Bond Counsel expresses no opinion.

For example, various proposals have been made in Congress and by the President that would subject interest on bonds that is otherwise excludable from gross income for federal income tax purposes, including interest on the Series 2016A Bonds, to federal income tax payable by certain bondholders with adjusted gross income in excess of specified thresholds. Prospective purchasers should consult their tax advisors as to the effect of such proposals on their individual situations.

#### **UNDERWRITING**

Pursuant and subject to the terms and conditions set forth in a Bond Purchase Agreement (the "Purchase Agreement") dated February 24, 2016, between Merrill Lynch, Pierce, Fenner & Smith Incorporated, J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, and RBC Capital Markets, LLC, (the "Underwriters"), for whom Merrill Lynch, Pierce, Fenner & Smith Incorporated is acting as representative, and the District, the Underwriters will agree to purchase from the District, and the District will agree to sell to the Underwriters, all, but not less than all, of the Series 2016A Bonds at a purchase price that results in an Underwriters' discount of \$680,603.43 from the initial reoffering prices derived from the yields shown on the inside cover page. The Underwriters have supplied the information as to the prices or yields shown on the inside cover page.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Under certain circumstances, the Underwriters and their affiliates may have certain creditor or other rights against the District and its affiliates in connection with such activities. In the course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities or instruments of the District (directly, as collateral securing other obligations or otherwise) or persons and entities with relationships with the District. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long or short positions in such assets, securities and instruments.

J.P. Morgan Securities LLC ("JPMS"), one of the Underwriters of the Series 2016A Bonds, has entered into negotiated dealer agreements (each, a "Dealer Agreement") with each of Charles Schwab & Co., Inc. ("CS&Co.") and LPL Financial LLC ("LPL") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase Series 2016A Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any Series 2016A Bonds that such firm sells.

Morgan Stanley, parent company of Morgan Stanley & Co. LLC., an underwriter of the Series 2016A Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute

municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2016A Bonds.

#### FINANCIAL ADVISOR

The District has retained Public Financial Management, Inc., Arlington, Virginia, as financial advisor (the "Financial Advisor") in connection with the issuance of the Series 2016A Bonds. Although the Financial Advisor assisted in the review of this Official Statement, the Financial Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in the Official Statement. The Financial Advisor is a financial advisory, investment management and consulting organization and is not engaged in the business of underwriting municipal securities.

#### VERIFICATION OF MATHEMATICAL COMPUTATIONS FOR THE REFUNDED BONDS

The accuracy of the arithmetical and mathematical computations (a) of the adequacy of the maturity principal amounts of the Defeasance Obligations in the Escrow Fund together with the interest income thereon and uninvested cash, if any, to pay, when due, the principal of, redemption premium, if any, and interest on the Refunded Bonds, and (b) relating to the determination of compliance with certain regulations and rulings promulgated under the Code will be verified by Bingham Arbitrage Rebate Services, Inc. Such verification of arithmetical accuracy and computations shall be based upon information and assumptions supplied by the District and on interpretations of the Code provided by Bond Counsel.

#### **RATINGS**

The Series 2016A Bonds have been assigned ratings of "AA" and "AA" by Standard & Poor's Ratings Services, a division of the McGraw-Hill Companies, Inc., and Fitch Ratings, respectively. Such ratings reflect only the view of such organizations and a fuller explanation of the significance of such ratings may be obtained from the rating agencies. A rating is not a recommendation to buy, sell or hold the Series 2016A Bonds. The District furnished to such rating agencies certain information regarding its policies, practices and finances, including information that is not included in this Official Statement. There is no assurance that such policies, practices and finances or such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by such rating agencies. Any such downward revision or withdrawal could have an adverse effect on the market price of the Series 2016A Bonds.

#### CONTINUING DISCLOSURE

The Securities and Exchange Commission has adopted Rule 15c2-12 under the Securities Exchange Act of 1934, as amended (the "Rule"). In general, the Rule prohibits an underwriter from purchasing or selling municipal securities, such as the Series 2016A Bonds, unless it has determined that the issuer of such securities and other persons deemed to be material "obligated persons" have committed to provide to The Electronic Municipal Market Access ("EMMA") system administered by the Municipal Securities Rulemaking Board (i) on an annual basis, certain financial information and operating data ("Annual Reports"), and audited financial statements, if available, or such unaudited financial statements as may be required by the Rule, and (ii) notice of various events described in the Rule ("Event Notices").

The District will covenant in the Continuing Disclosure Agreement (the form of which appears in Appendix E) for the benefit of the holders of the Series 2016A Bonds to provide to EMMA annually, not

later than December 31 of each year, commencing December 31, 2016, Annual Reports with respect to itself, as issuer. Similarly, the District will promptly provide Event Notices with respect to the Series 2016A Bonds to EMMA. In the five years preceding the date of this Official Statement, the District has materially complied with its other undertakings under the Rule. The District notes, however, that in connection with the District's determination that it had entered a Reserve Funding Period on December 31, 2010, the District filed notice thereof with EMMA on October 15, 2014.

The Continuing Disclosure Agreement requires the District to provide only that information which is subject to the terms of the Continuing Disclosure Agreement and only at specific times. The District may, from time to time, provide certain information and data in addition to that required by the Continuing Disclosure Agreement. If the District chooses to provide such information and data, it has no obligation to update such information or data or to include it in a future disclosure.

The sole remedy for a default under the Continuing Disclosure Agreement is to bring an action for specific performance of the District's covenants hereunder, and no assurance can be provided as to the outcome of any such proceeding.

#### **MISCELLANEOUS**

All of the foregoing summaries or descriptions of the provisions of the Enabling Act, the Series 2016A Bonds and the Trust Agreement are made subject to all of the detailed provisions thereof to which reference is made for further information. The foregoing summaries do not purport to be complete statements of any or all of the provisions thereof. Copies of the Trust Agreement are available upon request to the District at the following address: 1434 Air Rail Avenue, Virginia Beach, Virginia 23455, Phone (757) 460-2261.

Any statement in this Official Statement involving matters of opinion whether or not expressly so stated is intended as such and not as a representations of fact. The execution and delivery of this Official Statement have been duly authorized by the Commission.

/s/ Frederick N. Elofson

Vice Chairman Hampton Roads Sanitation District Commission

/s/ Edward G. Henifin

General Manager Hampton Roads Sanitation District

/s/ Jay A. Bernas

Director of Finance Hampton Roads Sanitation District

#### APPENDIX A

Basic Financial Statements and Related Auditor's Report for the Fiscal Year ended June 30, 2015, as rendered by KPMG LLP<sup>(1)</sup>

<sup>(1)</sup> This Appendix comprises the District's Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2015. In order to preserve cross-references within such pages, this Appendix has not been repaginated and, accordingly, retains the original pagination.







#### HAMPTON ROADS SANITATION DISTRICT

(A Component Unit of the Commonwealth of Virginia)

### **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

For the fiscal years ended June 30, 2015 and 2014

Prepared by: Finance Department

#### HAMPTON ROADS SANITATION DISTRICT

#### **TABLE OF CONTENTS**

|  | Page<br>Number |
|--|----------------|
| INTRODUCTORY SECTION   | 4              |
| Transmittal Letter GFOA Certificate of Achievement                                       | 1              |
| Principal Officials  | 4<br>5         |
| Organization Chart   | 5<br>6         |
| Map of HRSD Facilities   | 7              |
| History  | 8              |
| FINANCIAL SECTION  |                |
| Independent Auditors' Report   | 9              |
| Management's Discussion and Analysis (Unaudited)   | 11             |
| Basic Financial Statements   | 40             |
| Statements of Net Position   | 16<br>18       |
| Statements of Revenues, Expenses and Changes in Net Position Statements of Cash Flows    | 19             |
| Notes to Financial Statements  | 20             |
| REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)   |                |
| Schedule of Changes in Net Pension Liability and Related Ratios and                      | 39             |
| Schedule of Employer Contributions   |                |
| Schedules of Funding Progress  | 41             |
| STATISTICAL SECTION (UNAUDITED)  |                |
| Statistical Section Narrative  | 43             |
| Demographic and Other Miscellaneous Statistics   | 45             |
| Schedule of Operating Expenses, Net Position by Component and                            | 40             |
| Debt Service Expenditures  | 46             |
| Objective Classification of Departmental Expenditures                                    | 48             |
| Ratios of Outstanding Debt by Type   | 49<br>50       |
| Rate Schedule - Wastewater Treatment Charges Rate Schedule - Wastewater Facility Charges | 50<br>51       |
| Treatment Plant Operating Summary  | 52             |
| Ten Largest Customers  | 54             |
| Ten Largest Employers  | 55             |
| Comparison of Treated Flow to Billed Flow  | 56             |
| Number of Employees by Identifiable Activity   | 57             |
| OTHER SUPPLEMENTAL SECTION (UNAUDITED)   |                |
| Summary of Primary Bonded Debt Service   | 59             |
| Budgetary Comparison Schedule  | 60             |
| Notes to Budgetary Comparison Schedule   | 61             |
| Schedule of Revenues, Expenditures, and Debt Service for Operations                      | 63             |
| Objective Classification of Departmental Expenditures for Operations                     | 64             |
| Departmental Summary of Expenditures   | 66             |

# Introductory Section



**Norfolk** Berthed at Nauticus, the Battleship Wisconsin is one of the largest and last battleships ever built by the U.S. Navy.

**Portsmouth** offers Virginia's largest interactive children's museum (the home of the Lancaster Toy and Train Collection), which is located in Olde Towne, within a walkable stroll to other Portsmouth attractions, chef-owned restaurants and an eclectic mix of shops and galleries.

**Virginia Beach** King Neptune overlooks the Virginia Beach boardwalk and the 31st Street oceanfront park. Designed by P. DiPasquale, it is the largest cast bronze figure erected in the U.S. since the U.S. Marine Corps (Iwo Jima) Memorial in Washington, DC.



November 20, 2015

HRSD Commission Virginia Beach, Virginia

#### Dear Commissioners:

Political subdivisions of the Commonwealth of Virginia are required to publish a complete set of audited financial statements. This report fulfills that requirement for the fiscal year ended June 30, 2015.

HRSD's management assumes full responsibility for the completeness and reliability of information contained in this report, based on a comprehensive framework of internal control it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of material misstatements.

KPMG LLP, Certified Public Accountants, has issued an unmodified ("clean") opinion on HRSD's financial statements for the year ended June 30, 2015. The independent auditors report is located at the front of the financial section of this report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditors report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A, which complements this letter of transmittal, should be read in conjunction with it.

#### PROFILE OF HRSD

HRSD is an independent political subdivision of the Commonwealth of Virginia (the Commonwealth) created by referendum on November 5, 1940. HRSD was established to abate water pollution in the Hampton Roads area by providing a system of interceptor mains and wastewater treatment plants.

Approximately 1.7 million individuals, more than one-fifth of Virginia's population, reside in HRSD's service area, which is located in the southeastern corner of the Commonwealth. HRSD's territory of approximately 3,100 square miles encompasses nine cities, eight counties and several large military facilities. A brief history of HRSD is provided on page 8. HRSD is required by its enabling act to meet its obligations by charging user fees for its wastewater treatment services; no taxing authority is authorized by the enabling act. Currently, HRSD provides service and bills to approximately 465,000 service connections.

A board of eight commissioners (the Commission), appointed by the Governor of Virginia, governs HRSD. Commission members, who serve four-year staggered terms, can be reappointed without limitation and may be suspended or removed by the Governor at his pleasure. The Commission appoints a General Manager, who appoints the senior staff.

HRSD owns and operates 13 treatment plants. The nine major plants in Hampton Roads have design capacities ranging in size from 15 to 54 million gallons per day (MGD). Five of the major plants are located south of the James River and four are north of the James River (see map on page 7). The combined capacity of these nine plants is approximately 249 MGD. HRSD's four small rural treatment plants, which are located on the Middle Peninsula, have a combined capacity of almost one MGD.

HRSD maintains 532 miles of pipelines ranging from six inches to 66 inches in diameter. Interceptor pipelines, along with 83 pump stations in Hampton Roads, interconnect into two independent systems, one south of the James River and one north of the James River. The system allows some flow diversions to provide for maintenance or emergency work. HRSD owns and maintains 33 pump stations on the Middle Peninsula.

#### LOCAL ECONOMY

HRSD's service area includes nearly all of the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA). It is the ninth largest MSA in the southeastern United States and the thirty-seventh largest in the nation. Unlike many metropolitan areas, Hampton Roads' population nucleus is not confined to one central city. Instead, the approximately 1.7 million residents are spread among several cities and counties. Virginia Beach is the most populous city in the Commonwealth, with Norfolk and Chesapeake second and third, respectively. Suffolk is the largest city by land area. Unemployment rates remain below national averages in the region, which has a civilian labor force of 849,500.

The regional economy is supported by one of the highest military concentrations in the nation, diverse manufacturing and service sectors, shipbuilding and repair work, international port activities and tourism. Several state and private colleges and a large healthcare infrastructure also lend stability to the region.

A diverse customer base allows HRSD to maintain stable revenues. The ten largest customers account for only 9.7 percent of wastewater revenues for fiscal year 2015. In addition, HRSD's 2015 revenues contained only limited reliance (3.1 percent) on new customer connections.

#### LONG-TERM FINANCIAL PLANNING

HRSD's Financial Policy helps it maintain its solid fiscal health. Budgetary principles include using ongoing revenues to pay for ongoing expenses, and establishing annual cash contribution goals of at least 15 percent of budgeted capital costs. Under the Financial Policy, senior revenue and total revenue bonded debt service coverage ratios should not be less than 1.5 and 1.4 times annual debt service, respectively. Operating and ten-year capital improvement budgets are adopted annually. Included in the operating budget is a long-range financial forecast, which is guided by projections of operating and capital needs and the aforementioned Financial Policy requirements.

#### **MAJOR INITIATIVES**

HRSD continues its ambitious \$1.4 billion, ten-year Capital Improvement Program. Regulatory requirements to reduce nutrient discharges, initiatives to ensure appropriate wet weather capacity

exists within the regional sanitary sewer system, major plant upgrades and replacements of interceptor pipelines drive the capital program. Major projects are currently under construction at the Army Base Treatment Plant and Virginia Initiative Plant.

To minimize the impacts of its capital investments on ratepayers, HRSD continues to pursue grant opportunities when available. In 2015, HRSD received approximately \$16.5 million in grant reimbursements for improvements to several of its treatment plants.

#### AWARDS AND ACKNOWLEDGMENTS

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to HRSD for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2014. This was the 32<sup>nd</sup> consecutive year that HRSD has received this prestigious award. In order to be awarded a Certificate of Achievement, HRSD must publish an easily readable and efficiently organized CAFR that satisfied both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The preparation of this CAFR was made possible by the dedicated service of the entire Department of Finance staff. All members of the department have our sincere appreciation for their contributions to the preparation of this report. Credit must also be given to the Commission for their support for maintaining the highest standard of professionalism in the management of HRSD's finances.

Respectfully submitted.

Edward G. Henifin, P.E.

General Manager

Jay A. Bernas, P.E., MBA

Director of Finance

Carroll L. Acors, CPA

Caroll L. aco

Chief of Accounting



Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Hampton Roads Sanitation District Virginia

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2014

Executive Director/CEO

Upry R. Ener

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June 30, 2015

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and Treasurer

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James J. Pletl, PhD Director of Water Quality

#### **COUNSEL**

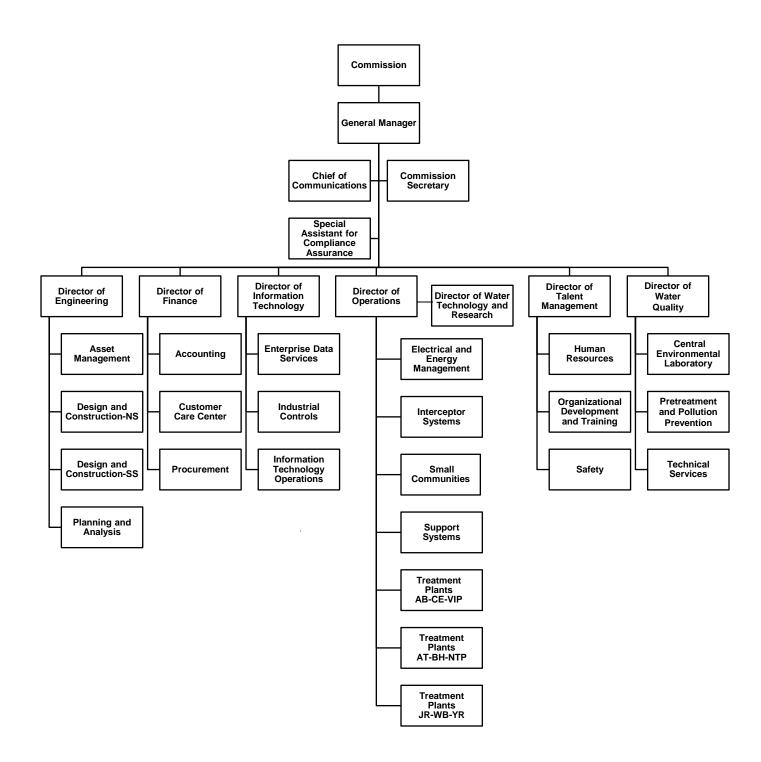
Kellam, Pickrell, Cox & Tayloe General Counsel

> AquaLaw, PLC Special Counsel

Jones, Blechman, Woltz & Kelly, PC Associate Counsel

> Sidley Austin, LLP Bond Counsel

June 30, 2015



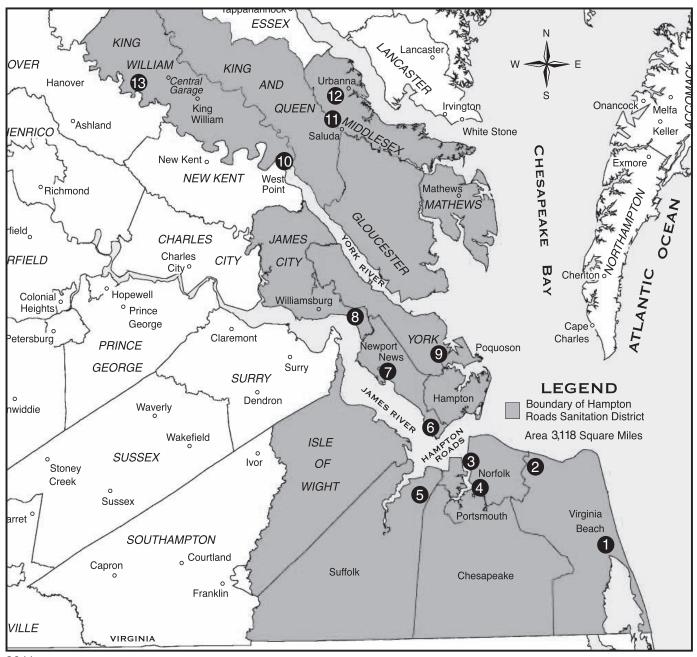
## Map of HRSD Facilities

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



# History of HRSD

June 30, 2015

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.

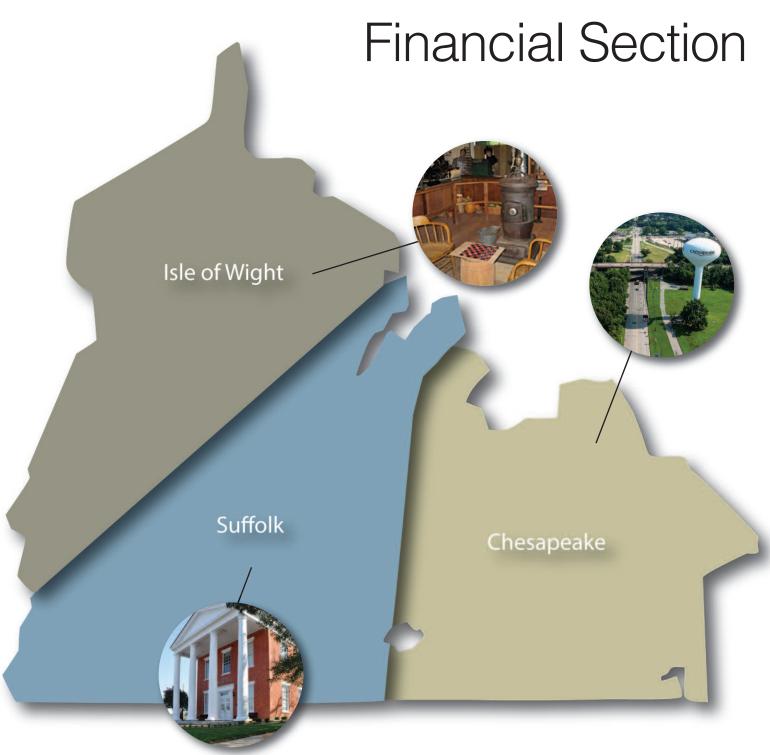
In 1934, the Virginia General Assembly created the Hampton Roads Sanitation Disposal Commission with instructions to plan the elimination of pollution in Hampton Roads. Recommendations were made to the General Assembly, which resulted in the Sanitary Districts Law of 1938, along with "an Act to provide 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 five 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 2015.

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 2014. The Army Base Treatment Plant was honored for 28 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—Silver, Boat Harbor—Platinum (13 consecutive years), Chesapeake-Elizabeth—Platinum, James River—Gold, Nansemond—Platinum (13 consecutive years), Virginia Initiative Plant—Platinum (19 consecutive years), Williamsburg—Platinum (20 consecutive years) and York River—Platinum (7 consecutive years). Three treatment plants in the Small Communities Division, Central Middlesex, King William and West Point, earned Gold Awards while Urbanna received a Silver.

HRSD's other Fiscal Year 2015 honors included one NACWA National Environmental Achievement Award in the Operations & Environmental Performance category and a second in the Research & Technology category for a joint initiative. HRSD and its partners also received a 2014 International Water Association Project Innovation Award for Applied Research. The US Green Building Council awarded Silver Leadership in Energy and Environmental Design (LEED) Certification for the South Shore Operations Center and the Elizabeth River Project recognized HRSD with a Living Lafayette Award. In addition, Team HRSD placed first overall in the International Operations Challenge Division 2 competition, a North Shore Interceptor Team received the Courageous Service Award presented by the Virginia Section of the American Water Works Association and the Chesapeake-Elizabeth Treatment Plant received the George W. Burke, Jr. Safety Award presented by the Virginia Water Environment Association.



**Chesapeake** Blending the best of urban and rural life, the City of Chesapeake remains a great place to live, work and raise a family. With a strong commitment to preserving both its historic and natural resources, coupled with a focus on a thriving future, the City has anchored the heart of Hampton Roads for more than 50 years.

**Isle of Wight County** Interpreting local history, the Isle of Wight County Museum's exhibits include prehistoric fossils; Civil War, Native American and colonial artifacts; a country store; and the museum's most notable artifact - the world's oldest, edible cured ham. The 1902 pork product exemplifies the patented Smithfield curing process.

**Suffolk** Overlooking the Nansemond River, the former Nansemond County Courthouse (1840) is a provincial Roman Revival style structure that served as a courthouse until the completion of the Mills Godwin Courts Complex in 1998. Today it retains its commanding presence and historical significance as the Suffolk Visitor Center. The first floor provides an exhibit gallery highlighting the history of Suffolk and the Great Dismal Swamp, a greeting and information area and a gift shop. The second floor houses municipal offices for the Department of Economic Development and Division of Tourism.



KPMG LLP Suite 1900 440 Monticello Avenue Norfolk, VA 23510

#### **Independent Auditors' Report**

The Commissioners Hampton Roads Sanitation District:

We have audited the accompanying financial statements of the Hampton Roads Sanitation District (HRSD), as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise HRSD's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of HRSD as of June 30, 2015 and 2014, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



#### **Emphasis of Matters**

As discussed in note 2 to the basic financial statements, in fiscal year 2015, HRSD adopted new accounting guidance described in Governmental Accounting Standards Board No. 68, Accounting and Financial Reporting for Pensions and Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date. Our opinion is not modified with respect to this matter.

As discussed in note 12 to the basic financial statements, the 2014 basic financial statements have been adjusted to correct a misstatement. Our opinion is not modified with respect to this matter.

#### **Other Matters**

#### Required Supplementary Information

U.S. generally accepted accounting principles require that Management's Discussion and Analysis on pages 11 through 15 and the Required Supplementary Information and related Notes to Required Supplementary Information on pages 39 through 41 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The introductory section, statistical section and other supplemental section are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.



November 20, 2015

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)

This narrative overview and analysis of the financial activities of the Hampton Roads Sanitation District (HRSD) for the fiscal year ended June 30, 2015 is provided by HRSD's management. Readers of the accompanying financial statements are encouraged to consider this information in conjunction with that furnished in the letter of transmittal, which can be found on pages 1 through 3 of this report.

#### FINANCIAL HIGHLIGHTS

- Total net position, as adjusted, increased \$1.9 million, or 0.3 percent, in 2015 as a result of this year's
  operations and adjustments for a change in accounting principle for pension liability, as explained in Note
  12 to the financial statements.
- Total revenues increased \$11.2 million, or 5.0 percent. This increase is primarily attributable to wastewater revenue rate increases.
- Operating expenses increased \$9.8 million, or 5.3 percent, principally due to a \$9.1 million increase in repairs and maintenance for repairs to collector systems required to maintain the integrity of the sewer and collector systems, and \$1.8 million for personnel services for a retirement incentive, partially offset by a \$1.4 million decrease in materials and supplies expense.
- Nonoperating expenses decreased \$1.9 million, or 7.5 percent, primarily due to lower interest expense.
- HRSD received \$16.5 million in capital grants from the Commonwealth of Virginia and \$3.0 million in other capital contributions in 2015 to help finance its capital improvement program.
- Restricted cash and cash equivalents and investments decreased \$86.4 million, or 50.0 percent, primarily
  due to capital asset construction activity. Unrestricted cash and cash equivalents and investments
  increased \$4.6 million, or 3.7 percent, primarily as a result of increased cash flows from wastewater rate
  increases.
- Net Property, Plant and Equipment increased \$87.4 million, or 8.6 percent, primarily due to expansion of treatment plants and interceptor systems.

#### **OVERVIEW OF FINANCIAL STATEMENTS**

HRSD's Basic Financial Statements are comprised of the financial statements and the notes to the financial statements. This report also contains required supplementary information and other supplementary information in addition to the Basic Financial Statements.

The Basic Financial Statements, found on pages 16 through 19 of this report, are designed to provide readers with a broad overview of HRSD's finances in a manner similar to a private sector business.

The Statements of Net Position, found on pages 16 and 17 of this report, present information on all of HRSD's assets, deferred outflows of resources, liabilities, and deferred inflows of resources; the difference between these components is reported as net position. Over time, changes in net position may serve as a useful indicator of whether the financial position of HRSD is improving or deteriorating.

The Statements of Revenues, Expenses and Changes in Net Position, found on page 18 of this report, present all of HRSD's revenues and expenses, showing how HRSD's net position changed during the year. All changes in net position are reported as soon as the underlying event takes place, thus giving rise to the changes, regardless of the timing of the cash flows. Thus, revenues and expenses are reported for some items that will only result in cash flows in future fiscal periods.

The Notes to Financial Statements, found on pages 20 through 37 of this report, provide additional information that is essential to a full understanding of the data provided in the financial statements.

In addition to the basic financial statements and the related notes, this report also presents certain required supplementary information concerning HRSD's progress in funding its obligations to provide pension and other post employment benefits to its employees.

Required Supplementary Information can be found beginning on page 39 of this report.

#### **FINANCIAL ANALYSIS**

As noted earlier, net position may serve over time as a useful indicator of HRSD's financial position. Assets exceeded liabilities by \$556.8 million at June 30, 2015 and by \$554.9 million at June 30, 2014.

By far, the largest portion of HRSD's net position (69.2 percent and 63.3 percent at June 30, 2015 and 2014, respectively) reflects its net investment in capital assets (e.g., land, buildings, machinery and equipment) less any related debt used to acquire those assets still outstanding, net of unspent bond proceeds. HRSD uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although HRSD's net investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, because the capital assets themselves cannot be used to liquidate these liabilities.

HRSD's net position is summarized in the following condensed Statements of Net Position as of June 30:

#### **HRSD's Condensed Statements of Net Position**

|  | (  |           | (as adjusted) (as adjusted) _ |           |          |           | 2015 vs. 2014 |          |         |  |
|--|----|-----------|-------------------------------|-----------|----------|-----------|---------------|----------|---------|--|
| (in thousands)                           |    | 2015      |                               | 2014 (1)  | 2013 (1) |           |               | Dollars  | Percent |  |
| Capital assets                           | \$ | 1,101,351 | \$                            | 1,013,958 | \$       | 972,099   | \$            | 87,393   | 8.6%    |  |
| Current assets and noncurrent assets     |    | 291,573   |                               | 367,381   |          | 395,946   |               | (75,808) | -20.6%  |  |
| Total assets                             | \$ | 1,392,924 | \$                            | 1,381,339 | \$       | 1,368,045 | \$            | 11,585   | 0.8%    |  |
| Long-term liabilities                    | \$ | 724,251   | \$                            | 716,563   | \$       | 741,747   | \$            | 7,688    | 1.1%    |  |
| Current liabilities                      |    | 118,035   |                               | 109,829   |          | 100,302   |               | 8,206    | 7.5%    |  |
| Total liabilities                        | \$ | 842,286   | \$                            | 826,392   | \$       | 842,049   | \$            | 15,894   | 1.9%    |  |
| Net investment in capital assets         | \$ | 385,597   | \$                            | 351,191   | \$       | 337,342   | \$            | 34,406   | 9.8%    |  |
| Restricted for debt service              |    | 22,070    |                               | 24,064    |          | 23,843    |               | (1,994)  | -8.3%   |  |
| Restricted for debt service reserve fund |    | 44,118    |                               | 45,207    |          | -         |               | (1,089)  | -2.4%   |  |
| Unrestricted                             |    | 105,040   |                               | 134,485   |          | 164,811   |               | (29,445) | -21.9%  |  |
| Total net position                       | \$ | 556,825   | \$                            | 554,947   | \$       | 525,996   | \$            | 1,878    | 0.3%    |  |

<sup>(1)</sup> As adjusted for the correction of inventory values. See Note 12 of the Notes to Financial Statements.

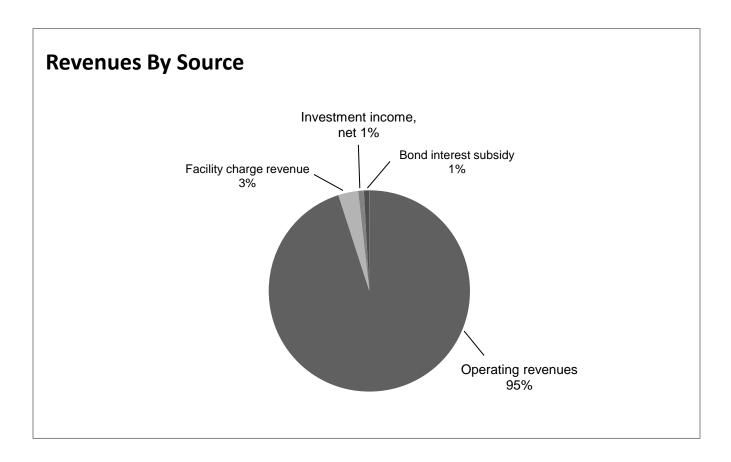
At June 30, 2015 and 2014, HRSD retained \$20.3 million and \$103.6 million of unspent bond proceeds, respectively. The increase in capital assets and the corresponding changes in current assets and noncurrent investments from 2013 through 2015 are primarily the result of issuing bonds in 2013 and 2014 and using these funds in subsequent fiscal years to fund capital improvements.

The changes in HRSD's net position can be determined by reviewing the following condensed Statements of Revenues, Expenses and Changes in Net Position:

#### HRSD's Condensed Statements of Revenues, Expenses and Changes in Net Position

|  |               | (as | adjusted)      | (as | adjusted)       | 2015 vs.     | 2014    |
|--|---------------|-----|----------------|-----|-----------------|--------------|---------|
| (in thousands)   | 2015          | 2   | <b>014</b> (1) | 2   | <b>2013</b> (1) | Dollars      | Percent |
| Operating revenues   | \$<br>225,561 | \$  | 215,181        | \$  | 202,615         | \$<br>10,380 | 4.8%    |
| Facility charge revenues                                   | 7,428         |     | 6,640          |     | 5,851           | 788          | 11.9%   |
| Investment income, net                                     | 1,409         |     | 1,450          |     | 991             | (41)         | -2.8%   |
| Bond interest subsidy                                      | 2,444         |     | 2,364          |     | 2,602           | 80           | 3.4%    |
| Total revenues   | 236,842       |     | 225,635        |     | 212,059         | 11,207       | 5.0%    |
| Operating expenses:  |               |     |                |     |                 |              |         |
| Wastewater treatment                                       | 114,137       |     | 109,149        |     | 86,973          | 4,988        | 4.6%    |
| General and administrative                                 | 38,678        |     | 33,012         |     | 31,410          | 5,666        | 17.2%   |
| Depreciation and amortization                              | 41,871        |     | 42,761         |     | 45,414          | (890)        | -2.1%   |
| Total operating expenses                                   | 194,686       |     | 184,922        |     | 163,797         | 9,764        | 5.3%    |
| Nonoperating expenses:                                     |               |     |                |     |                 |              |         |
| Disposal of capital assets                                 | -             |     | -              |     | 1,649           | 0            |         |
| Bond issuance costs  | 768           |     | -              |     | 658             | 768          |         |
| Interest expense   | 22,958        |     | 25,650         |     | 24,330          | (2,692)      | -10.5%  |
| Total nonoperating expenses                                | 23,726        |     | 25,650         |     | 26,637          | (1,924)      | -7.5%   |
| Total expenses   | 218,412       |     | 210,572        |     | 190,434         | 7,840        | 3.7%    |
| Income before capital contributions Capital contributions: | 18,430        |     | 15,063         |     | 21,625          | 3,367        | 22.4%   |
| State capital grants and other contributions               | 19,519        |     | 13,888         |     | 10,172          | 5,631        | 40.5%   |
| Change in net position                                     | 37,949        |     | 28,951         |     | 31,797          | 8,998        | 31.1%   |
| Total net position - beginning, as adjusted (1)            | 518,876       |     | 525,996        |     | 494,199         | (7,120)      | -1.4%   |
| Total net position - ending                                | \$<br>556,825 | \$  | 554,947        | \$  | 525,996         | \$<br>1,878  | 0.3%    |

<sup>(1)</sup> As adjusted for the correction of inventory values. See Note 12 of the Notes to Financial Statements.



Operating revenues increased 4.8 percent in 2015 and 6.2 percent in 2014. The majority of these increases are attributable to various rate increases in metered public wastewater services. Facility charge revenues increased \$0.8 million, or 11.9 percent, in 2015 due to an increase in new construction activity across the region after increasing \$0.8 million, or 13.5 percent, in 2014.

Operating expenses increased 5.3 percent in 2015 and increased 0.1 percent in 2014. Increases in 2015 were principally due to a \$9.1 million increase in repairs and maintenance for repairs to collector systems required to maintain the integrity of the sewer and collector systems, and \$1.8 million for personnel services for a retirement incentive, partially offset by a \$1.4 million decrease in materials and supplies expense. Increases in 2014 were principally due to a \$1.2 million increase in personnel services, primarily for merit adjustments, a \$1.4 million increase in repairs and maintenance costs and a \$1.5 million increase in general expenses, partially offset by a \$2.7 million decrease for depreciation and amortization, primarily for lower depreciation costs related to disposal of capital assets in 2013, and a \$1.2 million in 2015, primarily for continued lower depreciation costs related to disposal of capital assets in 2013, and decreased \$2.7 million in 2014, primarily for lower depreciation costs related to disposal of capital assets in 2013.

In 2015 and 2014, HRSD received \$19.5 million and \$13.9 million, respectively, in capital grants to help finance its capital improvement program.

#### CAPITAL ASSETS AND DEBT ADMINISTRATION

#### Capital Assets

At the end of 2015 and 2014, HRSD had approximately \$1.1 billion and \$1.0 billion, respectively, invested in a broad range of capital assets, including wastewater treatment plants, interceptor mains, pump stations, automotive, administrative and maintenance buildings, and office and computer software and equipment. These amounts represent a net increase of \$87.4 million, or 8.6 percent, in 2015 and \$41.9 million, or 4.3 percent, in 2014.

The following summarizes HRSD's capital assets, net of accumulated depreciation, as of June 30:

#### **HRSD's Capital Assets**

| (in thousands)                    | 2015 |           | 2014            | 2013          |
|-----------------------------------|------|-----------|-----------------|---------------|
| Land                              | \$   | 12,160    | \$<br>6,031     | \$<br>5,850   |
| Treatment plants                  |      | 446,624   | 436,007         | 457,012       |
| Interceptor systems               |      | 329,271   | 286,168         | 270,404       |
| Buildings                         |      | 32,758    | 33,086          | 33,849        |
| Small community facilities        |      | 15,446    | 16,889          | 17,445        |
| Office equipment                  |      | 6,909     | 8,798           | 10,180        |
| Automotive                        |      | 1,501     | 1,841           | 2,415         |
| Other equipment                   |      | 11,484    | 13,556          | 14,730        |
| Software and intangible assets    |      | 15,817    | 15,274          | 18,668        |
|                                   |      | 871,970   | 817,650         | 830,553       |
| Construction in progress          |      | 229,381   | 196,308         | 141,546       |
| Net property, plant and equipment | \$   | 1,101,351 | \$<br>1,013,958 | \$<br>972,099 |

The following summarizes the changes in capital assets for the years ended June 30:

| (in thousands)                           | 2015              |           |         | 2014      | 2013 |          |  |
|--|-------------------|-----------|---------|-----------|------|----------|--|
| Balance at beginning of year             | \$                | 1,013,958 | \$      | 972,099   | \$   | 910,292  |  |
| Additions                                |                   | 106,720   |         |           |      |          |  |
| Retirements                              |                   | (508)     | (5,867) |           |      |          |  |
| Depreciation and amortization            | (41,871) (42,761) |           |         |           |      | (45,414) |  |
| Accumulated depreciation retired         |                   | 508       |         | 218       |      | 4,218    |  |
| Net increase in construction in progress |                   | 33,073    |         | 54,762    |      | 2,150    |  |
| Balance at end of year                   | \$                | 1,101,351 | \$      | 1,013,958 | \$   | 972,099  |  |

The largest increase in capital assets in the past two years has been in treatment plant construction and interceptor system construction, which includes pipeline replacements, pump station rehabilitations and other improvements to the infrastructure. During 2015, HRSD invested significant funds in improvements to the Atlantic treatment plant, and the James River, York River, and Atlantic interceptor systems. During 2015 and 2014, HRSD invested significant funds in improvements to the Army Base and Virginia Initiative treatment plants and interceptor systems to comply with the Chesapeake Bay Total Maximum Daily Load requirements.

#### Long-Term Debt

At June 30, 2015, HRSD had a total of \$708.2 million in revenue bonds outstanding versus \$744 million in 2014, a decrease of 4.8 percent. This decrease is related to payments of \$147.1 million in 2015 on existing senior and subordinate debt, which was partially funded by a new refunding revenue bond in the amount of \$111.3 million.

The following summarizes HRSD's outstanding debt principal at June 30:

#### **HRSD's Outstanding Debt**

| (in thousands)            | 2015 2014 |         |    | 2013    |               |
|---------------------------|-----------|---------|----|---------|---------------|
| Senior revenue bonds      | \$        | 609,005 | \$ | 634,107 | \$<br>646,390 |
| Subordinate revenue bonds |           | 99,195  |    | 109,850 | 120,231       |
| Total outstanding debt    | \$        | 708,200 | \$ | 743,957 | \$<br>766,621 |

HRSD's financial strengths are reflected in its high credit ratings:

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

The development of HRSD's Capital Improvement Program and its related debt programs are governed by revenue Trust Agreements, which require senior and subordinate debt service coverage ratios of 1.2 and 1.0 times annual debt service, respectively. HRSD's Financial Policy and operating and capital improvement plans were developed with the intent to maintain coverage ratios in excess of these requirements. These Trust Agreements require a debt service reserve fund (DSRF); but funding the DSRF is not required if both senior and total debt service coverages are at least 1.35 times annual debt service and a liquidity ratio of 1.35 are also met. These amounts are shown as restricted on the statements of net position as of June 30, 2015 and 2014.

More detailed information regarding HRSD's capital assets and long-term debt are presented in Notes 5 and 8, respectively.

#### **ECONOMIC FACTORS AND RATES**

The five-year rolling average billed consumption has decreased over the last three fiscal years from approximately 120 million gallons per day (MGD) to approximately 114 MGD. HRSD's experience, primarily resulting from water conservation efforts throughout the region, is consistent with national trends.

In 2015, wastewater revenues increased as a result of planned rate increases needed, in large part, to fund HRSD's capital improvement program. Facility charge revenues, which are generally dependent on new growth and economic expansion, increased \$0.8 million, or 11.9 percent, in 2015 after increasing \$0.8 million, or 13.5 percent, in 2014. Facility charge revenues comprised only three percent of HRSD's total revenues in both 2015 and 2014.

Wastewater treatment rates for the 2015 fiscal year were increased by approximately 8 percent at the beginning of the year for the vast majority of HRSD customers. The increases are necessary to meet growing capital improvement needs and the increased cost of treatment operations. Facility charges, which provide funding for increased capacity resulting from new growth, were also increased.

It is anticipated that the average residential customer bill will rise by only \$1.92 per month in fiscal year 2016.

#### **CONTACTING HRSD'S FINANCIAL MANAGEMENT**

This financial report is designed to provide a general overview of HRSD's finances for all those with an interest. Questions concerning the information provided in this report or any requests for additional information should be addressed to the Director of Finance, 1434 Air Rail Avenue, Virginia Beach, Virginia 23455.

#### HAMPTON ROADS SANITATION DISTRICT STATEMENTS OF NET POSITION AS OF JUNE 30, 2015 AND 2014

#### ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

| (in thousands)                                       |           |           | (A: | s adjusted) |
|--|-----------|-----------|-----|-------------|
|  |           | 2015      | `   | 2014        |
| CURRENT ASSETS                                       |           |           |     | -           |
| Cash and cash equivalents                            | \$        | 7,825     | \$  | 37,924      |
| Cash and cash equivalents - Restricted               | •         | 86,451    | Ψ   | 82,300      |
| Investments  |           | 19,926    |     | -           |
| Investments - Restricted                             |           | -         |     | 8,600       |
| Accounts receivable, net                             |           | 38,138    |     | 37,437      |
| Accrued interest                                     |           | 237       |     | 312         |
| Other current assets                                 |           | 9,794     |     | 6,845       |
| TOTAL CURRENT ASSETS                                 |           | 162,371   |     | 173,418     |
| NONCURRENT ASSETS                                    |           |           |     |             |
| Cash and cash equivalents - Restricted               |           | -         |     | 56,957      |
| Investments  |           | 101,649   |     | 111,861     |
| Inventory  |           | 27,553    |     | 25,145      |
|  |           | 129,202   |     | 193,963     |
| NET PROPERTY, PLANT AND EQUIPMENT                    |           | 40.400    |     | 2.224       |
| Land   |           | 12,160    |     | 6,031       |
| Treatment plants                                     |           | 1,036,055 |     | 1,002,898   |
| Interceptor systems                                  |           | 467,277   |     | 415,988     |
| Buildings  |           | 45,296    |     | 45,132      |
| Small community facilities                           |           | 22,551    |     | 22,551      |
| Office equipment                                     |           | 44,364    |     | 43,933      |
| Automotive   |           | 16,217    |     | 16,129      |
| Other equipment                                      |           | 31,976    |     | 31,575      |
| Software and intangible assets                       |           | 27,783    |     | 23,759      |
|  |           | 1,703,679 |     | 1,607,996   |
| Less: Accumulated depreciation and amortization      |           | 831,709   |     | 790,346     |
|  |           | 871,970   |     | 817,650     |
| Construction in progress                             |           | 229,381   |     | 196,308     |
| NET PROPERTY, PLANT AND EQUIPMENT                    |           | 1,101,351 |     | 1,013,958   |
| TOTAL NONCURRENT ASSETS                              |           | 1,230,553 |     | 1,207,921   |
| TOTAL ASSETS   | <u>\$</u> | 1,392,924 | \$  | 1,381,339   |
| DEFERRED OUTFLOWS OF RESOURCES                       |           |           |     |             |
| Deferred loss on debt refunding                      |           | 12,380    |     | -           |
| Pension contributions subsequent to measurement date |           | 4,207     |     | -           |
| TOTAL DEFERRED OUTFLOWS OF RESOURCES                 |           | 16,587    |     | -           |
| TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES      | \$        | 1,409,511 | \$  | 1,381,339   |

(continued)

#### HAMPTON ROADS SANITATION DISTRICT STATEMENTS OF NET POSITION AS OF JUNE 30, 2015 AND 2014

#### LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION

| (in thousands)  |    |           | ( <i>A</i> | s adjusted) |
|---|----|-----------|------------|-------------|
|   |    | 2015      | `          | 2014        |
| CURRENT LIABILITIES                                     |    |           |            |             |
| Trade and contracts payable                             | \$ | 36,277    | \$         | 28,537      |
| Contract retention                                      |    | 6,165     |            | 6,506       |
| Accrued salaries and wages                              |    | 1,482     |            | 1,399       |
| Current portion of bonds payable                        |    | 31,618    |            | 30,137      |
| Variable rate demand bonds                              |    | 25,000    |            | 25,000      |
| Current portion of compensated absences                 |    | 2,696     |            | 2,591       |
| Debt interest payable                                   |    | 9,673     |            | 8,780       |
| Other liabilities                                       |    | 5,124     |            | 6,879       |
| TOTAL CURRENT LIABILITIES                               |    | 118,035   |            | 109,829     |
| LONG-TERM LIABILITIES                                   |    |           |            |             |
| Compensated absences                                    |    | 5,008     |            | 5,347       |
| Net pension liability                                   |    | 27,464    |            | -           |
| Bonds payable   |    | 691,779   |            | 711,216     |
| TOTAL LONG-TERM LIABILITIES                             |    | 724,251   |            | 716,563     |
| TOTAL LIABILITIES                                       |    | 842,286   |            | 826,392     |
| DEFERRED INFLOWS OF RESOURCES                           |    |           |            |             |
| Net difference between projected and actual earnings on |    |           |            |             |
| pension plan investments                                |    | 10,400    |            |             |
| TOTAL DEFERRED INFLOWS OF RESOURCES                     |    | 10,400    |            |             |
| NET POSITION  |    |           |            | 0=4.404     |
| Net investment in capital assets                        |    | 385,597   |            | 351,191     |
| Restricted for debt service                             |    | 22,070    |            | 24,064      |
| Restricted for debt service reserve fund                |    | 44,118    |            | 45,207      |
| Unrestricted  |    | 105,040   |            | 134,485     |
| TOTAL NET POSITION                                      |    | 556,825   |            | 554,947     |
| TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES        | •  | 4 400 544 | •          | 4 004 000   |
| AND NET POSITION  | \$ | 1,409,511 | \$         | 1,381,339   |

# HAMPTON ROADS SANITATION DISTRICT STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE FISCAL YEARS ENDED JUNE 30, 2015 and 2014

| (in thousands)   |           |                  | (As | s adjusted)      |
|--|-----------|------------------|-----|------------------|
|  |           | 2015             | ,   | 2014             |
| OPERATING REVENUES                                       |           |                  |     |                  |
| Wastewater treatment charges                             | \$        | 221,626          | \$  | 211,538          |
| Miscellaneous  |           | 3,935            |     | 3,643            |
| TOTAL OPERATING REVENUES                                 |           | 225,561          |     | 215,181          |
|  |           |                  |     |                  |
| OPERATING EXPENSES                                       |           | 444407           |     | 100 110          |
| Wastewater treatment                                     |           | 114,137          |     | 109,149          |
| General and administrative Depreciation and amortization |           | 38,678<br>41,871 |     | 33,012<br>42,761 |
| TOTAL OPERATING EXPENSES                                 |           | 194,686          |     | 184,922          |
| TOTAL OF ENATING EXI ENGLG                               |           | 134,000          |     | 104,322          |
| OPERATING INCOME   |           | 30,875           |     | 30,259           |
| NONOPERATING REVENUES (EXPENSES)                         |           |                  |     |                  |
| Wastewater facility charges                              |           | 7,428            |     | 6,640            |
| Investment income  |           | 1,695            |     | 1,872            |
| Bond interest subsidy                                    |           | 2,444            |     | 2,364            |
| Bond issuance costs                                      |           | (768)            |     | -                |
| Change in fair value of investments                      |           | (286)            |     | (422)            |
| Interest expense   |           | (22,958)         |     | (25,650)         |
| NET NONOPERATING EXPENSES                                |           | (12,445)         |     | (15,196)         |
| INCOME BEFORE CAPITAL CONTRIBUTIONS                      |           | 18,430           |     | 15,063           |
| CAPITAL CONTRIBUTIONS                                    |           |                  |     |                  |
| State capital grants                                     |           | 16,519           |     | 13,888           |
| Other capital contributions                              |           | 3,000            |     |                  |
|  |           | 19,519           |     | 13,888           |
| CHANGE IN NET POSITION                                   |           | 37,949           |     | 28,951           |
| TOTAL NET POSITION - Beginning                           |           | 554,947          |     | 525,996          |
| Opening adjustment of net position (Note 12)             |           | (36,071)         |     |                  |
| TOTAL NET POSITION - Ending                              | <u>\$</u> | 556,825          | \$  | 554,947          |

## HAMPTON ROADS SANITATION DISTRICT STATEMENTS OF CASH FLOWS FOR THE FISCAL YEARS ENDED JUNE 30, 2015 and 2014

| (in thousands)  |         | 2015      | (As | s adjusted)<br>2014 |
|---|---------|-----------|-----|---------------------|
| CASH FLOWS FROM OPERATING ACTIVITIES  |         |           |     |                     |
| Cash received from customers  | \$      | 223,121   | \$  | 207,543             |
| Other operating revenues  |         | 3,935     |     | 3,643               |
| Cash payments to suppliers for goods and services                               |         | (99,483)  |     | (90,274)            |
| Cash payments to employees for services   |         | (52,578)  |     | (50,126)            |
| Net cash provided by operating activities                                       |         | 74,995    |     | 70,786              |
| CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES                        |         |           |     |                     |
| Wastewater facility charges   |         | 7,428     |     | 6,640               |
| Acquisition and construction of property, plant and equipment                   |         | (128,752) |     | (77,687)            |
| Proceeds from debt refunding  |         | 135,645   |     | 5,356               |
| Bond interest subsidy   |         | 2,444     |     | 2,364               |
| Refunding of debt principal   |         | (130,810) |     | -                   |
| Principal paid on capital debt  |         | (28,672)  |     | (28,020)            |
| State capital grants  |         | 16,779    |     | 11,682              |
| Deposit used for capital asset construction                                     |         | (3,000)   |     | -                   |
| Bond issuance costs   |         | (768)     |     | -                   |
| Interest paid on capital debt   |         | (28,564)  |     | (27,333)            |
| Net cash used in capital and related financing activities                       |         | (158,270) |     | (106,998)           |
| CASH FLOWS FROM INVESTING ACTIVITIES  |         |           |     |                     |
| Purchases of investments  |         | (121,058) |     | (111,702)           |
| Sales and maturities of investments   |         | 119,658   |     | 105,109             |
| Interest and dividends on investments   |         | 1,770     |     | 2,043               |
| Net cash provided by (used in) investing activities                             |         | 370       |     | (4,550)             |
| NET DECREASE IN CASH AND CASH EQUIVALENTS                                       |         | (82,905)  |     | (40,762)            |
| CASH AND CASH EQUIVALENTS, AT BEGINNING OF YEAR                                 |         | 177,181   |     | 217,943             |
| CASH AND CASH EQUIVALENTS, AT END OF YEAR                                       | \$      | 94,276    | \$  | 177,181             |
| Reconciliation of Operating Income to Net Cash Provided by Operating Activities | <u></u> |           |     |                     |
| (in thousands)  |         |           |     |                     |
| Operating income  | \$      | 30,875    | \$  | 30,259              |
| Adjustments to reconcile operating income to net cash                           |         |           |     |                     |
| provided by operating activities  |         |           |     |                     |
| Depreciation and amortization   |         | 41,871    |     | 42,761              |
| Pension adjustments   |         | (2,414)   |     | -                   |
| (Increase) decrease in operating assets   |         |           |     |                     |
| Accounts receivable   |         | (701)     |     | (2,354)             |
| Inventory   |         | (2,408)   |     | (2,138)             |
| Net change in other current assets  |         | (209)     |     | 501                 |
| Increase in operating liabilities   |         |           |     |                     |
| Trade and contracts payable   |         | 6,887     |     | 1,167               |
| Accrued salaries and wages  |         | 83        |     | 332                 |
| Compensated absences  |         | (234)     |     | 80                  |
| Net change in other liabilities   |         | 1,245     | _   | 178                 |
| NET CASH PROVIDED BY OPERATING ACTIVITIES                                       | \$      | 74,995    | \$  | 70,786              |
| Noncash Capital and Related Financing Activities:                               |         |           |     |                     |
| Amortization of premium   |         | (6,499)   |     | (1,486)             |
|   |         |           |     |                     |

#### HAMPTON ROADS SANITATION DISTRICT NOTES TO FINANCIAL STATEMENTS JUNE 30, 2015 and 2014

#### **NOTE 1 - GENERAL INFORMATION**

#### Organization and Administration

The Hampton Roads Sanitation District (HRSD) was created by the Virginia General Assembly in 1940, as a political subdivision of the Commonwealth of Virginia (the Commonwealth), to construct, maintain, and operate a wastewater treatment system in the Hampton Roads area. The Hampton Roads Sanitation District Commission (the Commission) is HRSD's governing body and consists of eight members, appointed by the Governor. The Commission's functions were updated by Chapter 66 of the Acts of the Assembly of Virginia of 1960, as amended. The administration of HRSD is under the direction of a General Manager, supported by five department directors.

#### Regulatory Oversight

HRSD's operations are subject to regulations established by the United States Environmental Protection Agency and the Virginia Department of Environmental Quality. HRSD currently meets all of its permit requirements. Changes in these regulations could require HRSD to modify its treatment processes and require additional capital investment and/ or incur additional costs.

#### Purpose of HRSD

HRSD was created for the specific purpose of abating pollution in the Hampton Roads area through the interception of wastewater outfalls, installation of interception service into new areas as necessary and providing treatment facilities. HRSD provides points of interception throughout the region. The responsibility of providing lateral sewers and subtrunk facilities to carry sewage from industries, residences and businesses is generally the responsibility of the local municipal governments.

#### Corporate Limits of HRSD

The geographical limits of HRSD include:

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

#### NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Reporting Entity

HRSD is a political subdivision of the Commonwealth and a government instrumentality. The Commission is granted corporate powers by the *Code of Virginia*. The Governor of the Commonwealth appoints the Commission members, who serve at his pleasure. HRSD is reported in the Commonwealth's Comprehensive Annual Financial Report as a discretely presented component unit. The Commonwealth is not obligated to repay HRSD's debt. HRSD derives its revenues primarily from charges for wastewater treatment services. HRSD has no taxing authority.

#### **Basis of Accounting**

The accompanying financial statements report the financial position and results of operations of HRSD in accordance with U.S. generally accepted accounting principles (GAAP). Because HRSD is a political subdivision of the Commonwealth, the preparation of HRSD's financial statements are governed by the pronouncements of the Governmental Accounting Standards Board (GASB). These statements are prepared on an enterprise fund basis and present HRSD's operating revenues and expenses in a manner similar to a private business, where the costs, including depreciation, of providing services to the general public on a continuing basis are financed or recovered primarily through user charges.

An enterprise fund, a proprietary fund type, is accounted for on an economic resources measurement focus. All assets and liabilities, whether current or noncurrent, associated with its activities are included on its statements of net position. Proprietary fund type operating statements present increases (revenues) and decreases (expenses) in fund equity. The financial statements are presented using the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when incurred.

#### **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. Transfers to and from the Operating and the Improvement budgets require the approval of the Commission. Unspent Improvement budget items may be spent in subsequent fiscal years if approved by the Commission.

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

#### Cash Equivalents

All short-term investments that are highly liquid are considered to be cash equivalents. Cash equivalents are readily convertible to cash, and at the day of purchase, have an original maturity date of no longer than three months. Noncurrent restricted cash and cash equivalents are revenue bond proceeds held for the construction of noncurrent assets (see Note 3).

#### Investments

Investments, which consist of U.S. government obligations including agencies, FDIC-guaranteed corporate notes and other corporate notes and bonds, and municipal bonds, are reported at fair value when the original maturity is greater than a year. Investments with an original maturity of one year or less are stated at cost, net of any unamortized premium or discount. HRSD's investment practices are governed by its formal investment policy.

#### Allowance for Uncollectible Accounts

HRSD provides an allowance for estimated uncollectible accounts receivable based on its bad debt experience. The balance in the allowance for uncollectible accounts is considered by management to be sufficient to cover anticipated losses on reported receivable balances.

#### Inventory

Inventory is carried at the lower of cost or market value and consists primarily of operating and maintenance materials..

#### Property, Plant and Equipment

HRSD funds its capital improvement program through the issuance of debt and its own resources. The proceeds of debt are reported as restricted assets. Generally, for projects funded with both debt proceeds and other resources, it is HRSD's policy to use available debt proceeds to pay project expenditures prior to using its own resources.

Property, plant and equipment purchased or constructed are reported at cost, including interest cost on funds borrowed to finance the construction of major capital additions. The capitalization threshold is \$5,000. Donated assets are reported at market value at the date of donation. Property, plant and equipment are depreciated using the straight-line method over the following estimated useful lives:

Treatment plants, buildings and facilities 30 years Interceptor systems 50 years Office furniture and equipment 5-10 years Software and intangible assets 5-7 years Automotive 5 years

Depreciation and amortization recognized on property, plant and equipment is an operating expense.

#### Deferred Outflows and Inflows of Resources

In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expenses) until then. HRSD has two items that qualify for reporting in this category. The first is the deferred charge on refunding reported in the statements of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The second is pension contributions to the Virginia Retirement System made subsequent to the measurement date of June 30, 2014. These contributions will be recognized as a reduction of the Net Pension Liability during the year ended June 30, 2016.

In addition to liabilities, the statement of net position reports a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The government has only one type of these items, for the net difference between projected and actual earnings on pension plan investments, which is amortized over future years.

#### Revenue Recognition

Generally, wastewater treatment charges are computed based on a user's water consumption. These charges are recognized as revenue when billed. Revenues earned but unbilled through June 30 of each fiscal year are accrued at year-end. Wastewater facility charges are computed based on a new connection's water meter size and potential for high strength pollutant discharges, and are recognized as revenue prior to the issuance of a building or operating permit.

#### Operating and Nonoperating Revenues and Expenses Recognition

HRSD distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses result from providing services and producing and delivering goods in connection with HRSD's principal service of providing wastewater treatment. The majority of operating revenues are from wastewater treatment, but other associated miscellaneous income from other related services and charges are also included. Revenues and expenses not meeting the operating definition are reported as nonoperating. These consist mainly of wastewater facility charges, investment income, capital contributions and interest expense.

#### Compensated Absences

All permanent employees earn leave upon starting a full-time position. The amount and type of leave earned is based upon the employee's date of hire and years of service and is expensed as employees earn the right to these benefits.

Permanent employees hired prior to January 1, 2014 earn from 15 to 27 days of annual leave per year. The maximum annual leave an employee may accumulate at year-end varies by the years of service, with the maximum being 54 days. An employee has a vested right to their annual leave when earned. These employees also earn eight hours per month of sick leave regardless of the number of years of service. The amount of sick leave that may be accumulated is unlimited. After five years of service with HRSD, an employee has vested rights to 35 percent of accumulated sick leave to a maximum of \$10,000. For these employees, long-term disability (LTD) insurance is an optional employee paid benefit that replaces part of their income if the employee suffers a serious illness or injury and can't work for an extended period of time.

Permanent employees hired after January 1, 2014 earn 8 hours of paid time off for each two-week pay period. Employees may use accumulated paid time off for any type of absence from work, subject to supervisor approval. The maximum paid time off an employee may accumulate at year-end is 208 hours. After five years of service with HRSD, an employee has vested rights to 50 percent of their accumulated paid time off at separation. For these employees, HRSD also provides a state mandated long-term disability (LTD) benefit since these employees are not eligible for disability retirement benefits through Virginia Retirement System. The long-term disability benefit provides income replacement for employees who become disabled and unable to work for an extended period of time due to a non work-related or work-related condition (as determined under the Virginia Workers' Compensation Act). Long-term disability benefits begin at the expiration of an additional state mandated employer paid short-term disability (STD) benefit period of 125 days.

#### Pensions

HRSD employees participate in an agent multiple-employer defined benefit pension plan administered by the Virginia Retirement System (VRS), which acts as a common investment and administrative agent for political subdivisions in the Commonwealth. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of HRSD's Retirement Plan and the additions to or deductions from HRSD's Retirement Plan's net fiduciary position have been determined on the same basis as they were reported to HRSD by VRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms.

#### Use of Estimates

The preparation of these financial statements requires management to make estimates and assumptions. These estimates affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from management's estimates.

#### **New Accounting Pronouncement**

During the fiscal year ended June 30, 2015, HRSD adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27, and GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68. The objective of Statement No. 68 is to (a) improve accounting and financial reporting by state and local governments for pensions and to (b) improve information provided by state and local governmental employers about financial support for pensions that is provided by other entities. The objective of GASB Statement No. 71 is to address an issue regarding application of the transition provisions of GASB Statement No. 68 relating to amounts associated with contributions made to a defined benefit pension plan after the measurement date of the beginning net pension liability. Due to limitations on the information available from the VRS for the prior fiscal year, it was determined to be impractical for HRSD to restate the 2014 financial statements. As a result of the adoption of GASB Statements No. 68 and No. 71, HRSD has made an adjustment to net position as of July 1, 2014 to recognize the cumulative effect of the change in accounting for pensions as further discussed in Note 12.

The financial statements as of and for the year ended June 30, 2014, presented for comparative purposes, reflect the requirements of GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* and GASB Statement No. 50, *Pension Disclosures – an amendment of GASB Statements No. 25 and No. 27*.

#### **NOTE 3 - DEPOSITS AND INVESTMENTS**

#### **Deposits**

Custodial Credit Risk. This risk is associated with the inability of a governmental entity to recover deposits from a financial institution in the event of a failure. At June 30, 2015 and 2014, the carrying values of HRSD's deposits were \$73,730,000 and \$73,342,000, respectively, and the bank balances were \$76,335,000 and \$75,397,000, respectively. All of the bank balances at June 30, 2015 were covered by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act (the Act).

In accordance with the Act, the depository institution pledged collateral in the form of federal obligations with a fair value equal to 110 percent of HRSD's deposits with a third party trustee in the name of the Treasurer of the Commonwealth. In the event that the banking institution fails, the Treasurer will take possession of the collateral, liquidate it and reimburse HRSD up to the value of its deposits. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by banks.

Credit Risk. HRSD invests overnight in money market accounts that are invested in government securities and the Commonwealth of Virginia Local Government Investment Pool (LGIP). As of June 30, 2015 and 2014, HRSD had deposits in Merrill Lynch's FFI Government Fund and Fidelity's Government Money Market Fund that were rated AAAm by Standard & Poor's. The Treasury Board of Virginia provides LGIP oversight. HRSD's investment in the LGIP was rated AAAm by Standard & Poor's. FDIC-guaranteed corporate notes are rated AAA by Standard & Poor's.

#### Investments

(in thousands)

As of June 30, HRSD had the following investments and maturities:

| Investment Type            |       | <u>Fa</u> | air Value | <u>Les</u> | s Than 1 | <u>1-3</u>    |
|----------------------------|-------|-----------|-----------|------------|----------|---------------|
| June 30, 2015              |       |           |           |            |          |               |
| U.S. Treasury Securities   |       | \$        | 62,655    | \$         | 5,890    | \$<br>56,765  |
| Federal Agency Notes/Bonds |       |           | 26,702    |            | -        | 26,702        |
| Corporate Notes/Bonds      |       |           | 15,282    |            | 477      | 14,805        |
| Certificates of Deposit    |       |           | 11,651    |            | 9,402    | 2,249         |
| Commercial Paper           |       |           | 2,446     |            | 2,446    | -             |
| Municipal Securities       |       |           | 1,711     |            | 1,711    | -             |
| Supranationals             |       |           | 1,128     |            |          | <br>1,128     |
|                            | Total | \$        | 121.575   | \$         | 19.926   | \$<br>101.649 |

| Investment Type            |       | Fair Value |         | Less Than 1 |       | <u>1-3</u>    |
|----------------------------|-------|------------|---------|-------------|-------|---------------|
| June 30, 2014              |       |            |         |             |       |               |
| U.S. Treasury Securities   |       | \$         | 74,293  | \$          | -     | \$<br>74,293  |
| Federal Agency Notes/Bonds |       |            | 16,866  |             | -     | 16,866        |
| Corporate Notes/Bonds      |       |            | 11,695  |             | -     | 11,695        |
| Certificates of Deposit    |       |            | 10,644  |             | 3,353 | 7,291         |
| Commercial Paper           |       |            | 5,247   |             | 5,247 | -             |
| Municipal Securities       |       |            | 1,716   |             |       | <br>1,716     |
|                            | Total | \$         | 120.461 | \$          | 8.600 | \$<br>111.861 |

Interest Rate Risk. In accordance with its investment policy, HRSD manages its exposure to declines in fair values by limiting the weighted average maturity of various portfolios in a manner that meets HRSD's liquidity needs.

Investment Maturities (in years)

Custodial Credit Risk. For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, HRSD will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. HRSD's policy is to utilize its Trustee for its investments, The Bank of New York Trust Department, as recipient of all investment transactions on a delivery versus pay basis. The Trustee may not be a counterparty to the investment transaction. At June 30, 2015 and 2014, the Trust Department of the Bank of New York held \$121,575,000 and \$120,461,000, respectively, in investments in the Trustee's name for HRSD.

Credit Risk. HRSD's Trust Agreement permits HRSD to invest in investment instruments that are authorized by the Commonwealth. HRSD's investment securities using the Standard & Poor's credit quality ratings scale are presented below:

| As of June 30, 2015        | Standard & Poor's Credit Rating by Investment Type |    |        |    |       |    |        |    |       |    |         |
|----------------------------|--|----|--------|----|-------|----|--------|----|-------|----|---------|
| (in thousands)             | AAA AA+  |    |        | AA | AA-   |    | A-1    |    | Total |    |         |
| <u>Investments</u>         |  |    |        |    |       |    |        |    |       |    |         |
| US Treasury Securities     | \$ -   | \$ | 62,655 | \$ | -     | \$ | -      | \$ | -     | \$ | 62,655  |
| Federal Agency Notes/Bonds | -  |    | 26,702 |    | -     |    | -      |    | -     |    | 26,702  |
| Corporate Notes/Bonds      | 3,838  |    | 3,207  |    | 4,716 |    | 3,521  |    | -     |    | 15,282  |
| Certificates of Deposit    | -  |    | -      |    | -     |    | 6,750  |    | 4,901 |    | 11,651  |
| Commercial Paper           | -  |    | -      |    | -     |    | -      |    | 2,446 |    | 2,446   |
| Municipal Securities       |  |    | 1,550  |    | 161   |    | -      |    | -     |    | 1,711   |
| Supranationals             | 1,128  |    | -      |    | -     |    | -      |    | -     |    | 1,128   |
| Total Investments          | \$ 4,966   | \$ | 94,114 | \$ | 4,877 | \$ | 10,271 | \$ | 7,347 | \$ | 121,575 |

As of June 30, 2014

| (in thousands)             | AA+          | AA          | AA-         | A-1+        | A-1         | Total         |
|----------------------------|--------------|-------------|-------------|-------------|-------------|---------------|
| <u>Investments</u>         |              |             |             |             |             |               |
| US Treasury Securities     | \$<br>74,293 | \$<br>-     | \$<br>-     | \$<br>-     | \$<br>-     | \$<br>74,293  |
| Federal Agency Notes/Bonds | 16,866       | -           | -           | -           | -           | 16,866        |
| Corporate Notes/Bonds      | 5,187        | 4,437       | 2,071       | -           | -           | 11,695        |
| Certificates of Deposit    | -            | -           | 2,249       | 7,543       | 852         | 10,644        |
| Commercial Paper           | -            | -           | -           | -           | 5,247       | 5,247         |
| Municipal Securities       | 1,553        | 163         | -           | -           | -           | 1,716         |
| Total Investments          | \$<br>97,899 | \$<br>4,600 | \$<br>4,320 | \$<br>7,543 | \$<br>6,099 | \$<br>120,461 |

Concentration of Credit Risk. HRSD's investment policy includes a maximum exposure for each individual issuer for its permitted investment categories. U.S. Treasury obligations, however, are not subject to these issuer limits. Federal agency obligations and repurchase agreements are limited to 35 percent per issuer. Corporate notes and negotiable certificates of deposit are limited to 3 percent per issuer. Money market funds and local government investment pools are each limited to 50 percent per issuer. Collateralized bank deposits are limited to 25 percent per issuer. Municipal obligations, commercial paper, and bankers acceptances are limited to 5 percent per issuer.

The change in fair value for the years ended June 30 is calculated as follows:

| (in thousands)                                      | 2015       | 2014       |
|---|------------|------------|
| Fair value of investments, end of year              | \$ 121,575 | \$ 120,461 |
| Add: Proceeds of investments sold or maturing       |            |            |
| during the year                                     | 119,658    | 105,109    |
| Less: Cost of investments purchased during the year | (121,058)  | (111,702)  |
| Less: Fair value of investments, beginning of year  | (120,461)  | (114,290)  |
| Change in fair value of investments                 | \$ (286)   | \$ (422)   |

The components of restricted cash and cash equivalents and investments at June 30 are as follows:

| (in thousands)  | _  | 2015   | 2014          |
|---|----|--------|---------------|
| Debt service  | \$ | 22,070 | \$<br>24,064  |
| Debt service reserve fund                                 |    | 44,118 | 45,207        |
| Revenue bond construction funds - current                 |    | 20,263 | 21,629        |
| Revenue bond construction funds - noncurrent              |    |        | <br>56,957    |
| Total cash, cash equivalents and investments - restricted | \$ | 86,451 | \$<br>147,857 |

#### NOTE 4 - ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS

An analysis of the allowance for uncollectible accounts for the years ended June 30 is as follows:

| (in thousands)                                    | _  | 2015    |    | _ | 2014    |
|---|----|---------|----|---|---------|
| Balance, beginning of year                        | \$ | 1,651   | \$ | 6 | 1,539   |
| Add: Current provision for uncollectible accounts |    | 2,196   |    |   | 1,641   |
| Less: Charge-off of uncollectible accounts        |    | (1,898) |    |   | (1,529) |
| Balance, end of year                              | \$ | 1,949   | 9  | 3 | 1,651   |

HRSD's collection ratio for the years ended June 30, 2015 and 2014 were 99.1 and 99.3 percent, respectively.

#### **NOTE 5 - PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment activity for the years ended June 30 was as follows:

| (in thousands)                                 |       | Balance   |          |                  |    |            | Balance         |                  |    |                   | Balance         |
|--|-------|-----------|----------|------------------|----|------------|-----------------|------------------|----|-------------------|-----------------|
|  |       | 6/30/13   | <u> </u> | <u>Additions</u> | Re | etirements | 6/30/14         | <u>Additions</u> | Re | <u>etirements</u> | <u>6/30/15</u>  |
| Non-Depreciable Capital Assets                 |       |           |          |                  |    |            |                 |                  |    |                   |                 |
| Land   | \$    | 5,850     | \$       | 181              | \$ | -          | \$<br>6,031     | \$<br>6,129      | \$ | -                 | \$<br>12,160    |
| Construction in progress                       |       | 141,546   |          | 70,986           |    | (16,224)   | 196,308         | 102,436          |    | (69,363)          | 229,381         |
| Depreciable Capital Assets                     |       |           |          |                  |    |            |                 |                  |    |                   |                 |
| Treatment plants                               |       | 1,001,276 |          | 1,622            |    | -          | 1,002,898       | 33,157           |    | -                 | 1,036,055       |
| Interceptor systems                            |       | 392,404   |          | 23,584           |    | -          | 415,988         | 51,289           |    | -                 | 467,277         |
| Buildings                                      |       | 44,471    |          | 661              |    | -          | 45,132          | 164              |    | -                 | 45,296          |
| Small community facilities                     |       | 22,551    |          | -                |    | -          | 22,551          | -                |    | -                 | 22,551          |
| Office equipment                               |       | 41,928    |          | 2,005            |    | -          | 43,933          | 431              |    | -                 | 44,364          |
| Automotive                                     |       | 15,785    |          | 562              |    | (218)      | 16,129          | 596              |    | (508)             | 16,217          |
| Other equipment                                |       | 30,332    |          | 1,243            |    | -          | 31,575          | 401              |    | -                 | 31,976          |
| Software and intangible assets                 |       | 23,759    |          | =                |    | =          | 23,759          | 4,024            |    | -                 | 27,783          |
| Tota   | al \$ | 1,719,902 | \$       | 100,844          | \$ | (16,442)   | \$<br>1,804,304 | \$<br>198,627    | \$ | (69,871)          | \$<br>1,933,060 |
| Less accumulated depreciation and amortization |       |           |          |                  |    |            |                 |                  |    |                   |                 |
| Treatment plants                               |       | (544,264) |          | (22,627)         |    | -          | (566,891)       | (22,540)         |    | -                 | (589,431)       |
| Interceptor systems                            |       | (122,000) |          | (7,820)          |    | -          | (129,820)       | (8,186)          |    | -                 | (138,006)       |
| Buildings                                      |       | (10,622)  |          | (1,424)          |    | -          | (12,046)        | (492)            |    | -                 | (12,538)        |
| Small community facilities                     |       | (5,106)   |          | (556)            |    | -          | (5,662)         | (1,443)          |    | -                 | (7,105)         |
| Office equipment                               |       | (31,748)  |          | (3,387)          |    | -          | (35,135)        | (2,320)          |    | -                 | (37,455)        |
| Automotive                                     |       | (13,370)  |          | (1,136)          |    | 218        | (14,288)        | (936)            |    | 508               | (14,716)        |
| Other equipment                                |       | (15,602)  |          | (2,417)          |    | -          | (18,019)        | (2,473)          |    | -                 | (20,492)        |
| Software and intangible assets                 |       |           |          |                  |    |            |                 |                  |    |                   |                 |
| - amortization                                 |       | (5,091)   |          | (3,394)          |    | -          | (8,485)         | <br>(3,481)      |    | -                 | (11,966)        |
| Tota   |       | (747,803) |          | (42,761)         |    | 218        | (790,346)       | (41,871)         |    | 508               | (831,709)       |
| Net property, plant and equipment              | \$    | 972,099   | \$       | 58,083           | \$ | (16,224)   | \$<br>1,013,958 | \$<br>156,756    | \$ | (69,363)          | \$<br>1,101,351 |

#### **NOTE 6 - COMPENSATED ABSENCES**

The liability for vested annual, sick, paid time off and compensatory leave at June 30 is as follows:

| (in thousands)          | Balance  |               |              | Balance  |               |              | Balance  |
|-------------------------|----------|---------------|--------------|----------|---------------|--------------|----------|
|                         | 6/30/13  | <u>Earned</u> | <u>Taken</u> | 6/30/14  | <u>Earned</u> | <u>Taken</u> | 6/30/15  |
| Annual leave            | \$ 4,976 | \$ 1,618      | \$ (1,514)   | \$ 5,080 | \$ 1,552      | \$ (1,791)   | \$ 4,841 |
| Sick leave              | 2,853    | 927           | (945)        | 2,835    | 993           | (1,141)      | 2,687    |
| Paid time off           | -        | 31            | (8)          | 23       | 237           | (84)         | 176      |
| Compensatory leave      | 29       | 96            | (125)        |          |               |              |          |
| Total                   | 7,858    | \$ 2,672      | \$ (2,592)   | 7,938    | \$ 2,782      | \$ (3,016)   | 7,704    |
| Less: Current liability | 2,389    |               |              | 2,591    |               |              | 2,696    |
| Long-term liability     | \$ 5,469 |               |              | \$ 5,347 |               |              | \$ 5,008 |

#### **NOTE 7 - DEFINED BENEFIT PLANS**

#### Post-Retirement Health Benefit Plan

#### Plan Description

HRSD provides other post employment benefits (OPEB) for its employees through a single employer defined benefit plan. The plan was established and may be amended by the Commission. HRSD's plan provides two different health and dental benefit plans for eligible retired employees and their beneficiaries (members). Members become eligible for benefits after 15 years of service and when a member qualifies for unreduced retirement benefits from the Virginia Retirement System. Participating beneficiaries may continue coverage under the plan after the death of

the retiree. Medicare-eligible members may participate in a Medicare supplement plan. Members not eligible for Medicare may participate in a high deductible health plan.

#### Funding Policy

Contribution requirements are actuarially determined. Funding is subject to approval by the Commission. Medicareeligible members contribute \$45 per month for retiree-only coverage and from \$442 to \$460 per month for retiree and dependent coverage. Members not eligible for Medicare contribute \$120 per month for retiree-only coverage and from \$517 to \$535 per month for retiree and dependent coverage. HRSD shares the cost of coverage under the plan with participating retirees by paying the difference between the contributions it requires retirees to make and the annual required contribution (ARC). The current contribution rate is 6 percent of annual covered payroll.

#### **Annual OPEB Cost**

HRSD's annual OPEB cost is calculated based on an actuarially determined ARC. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years. Information related to the HRSD's annual OPEB cost, ARC, actual contributions, and changes to the net OPEB obligation is as follows:

|             |             |      |        |    |         | Percentage of |    |           |
|-------------|-------------|------|--------|----|---------|---------------|----|-----------|
| Fiscal Year |             | Act  | uarial | Α  | nnual   | Annual ARC    | Ne | t OPEB    |
| Ended       | ARC         | Adju | stment | OP | EB Cost | Contributed   | Ol | oligation |
| 2015        | \$<br>2,177 | \$   | -      | \$ | 2,177   | 100%          | \$ | -         |
| 2014        | \$<br>2,244 | \$   | -      | \$ | 2,244   | 100%          | \$ | -         |
| 2013        | \$<br>2,102 | \$   | -      | \$ | 2,102   | 100%          | \$ | -         |

#### Funded Status and Funding Progress

The funded status of the plan as of June 30, 2015 was as follows:

| (in thousands)                                    |              |
|---|--------------|
| Actuarial accrued liability (AAL)                 | \$<br>42,017 |
| Actuarial value of plan assets                    | 37,008       |
| Unfunded actuarial accrued liability (UAAL)       | \$<br>5,009  |
| Funded ratio (actuarial value of plan assets/AAL) | 88.1%        |
| Annual covered payroll (active plan members)      | \$<br>47,674 |
| UAAL as a percentage of covered payroll           | 10.5%        |

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the possibility of occurrence of events far into the future. Examples include assumptions about future employment, investment returns, mortality and healthcare cost trends. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

#### **Actuarial Methods and Assumptions**

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by HRSD and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

The information presented in the required supplemental schedules was determined as part of the actuarial valuations at the dates indicated. The actuarial value of plan assets is equal to market value.

Additional information at June 30, 2015, the date of the most recent valuation, follows:

Actuarial valuation method Projected unit credit method Amortization cost method Level percent of pay, closed

Remaining amortization 10 years

Asset valuation Smoothed market value with phase-in, using a 5-year smoothing period

Actuarial assumptions:

Discount Rate 6%

Annual healthcare cost trend 4.7%, increasing to 5.4% after 3 years and 3.2% after 85 years

Assumed rate of inflation 2.5%

#### **Defined Benefit Pension Plan**

#### Plan Description

HRSD employees participate in an agent multiple-employer defined benefit pension plan administered by the Virginia Retirement System (VRS). All full-time, salaried permanent employees of HRSD are automatically covered by the Plan upon employment. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave and previously refunded service

VRS administers three different benefit structures for covered employees – Plan 1, Plan 2 and the Hybrid Retirement Plan (HRP). The specific information for each plan is set out below:

- Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010 and they were vested as of January 1, 2013. Non-hazardous duty members are eligible for an unreduced retirement benefit beginning at age 65 with at least five years of service credit. They may retire with a reduced benefit as early as age 55 with at least five years of service credit or age 50 with at least 10 years of service credit.
- Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, and they were not vested as of January 1, 2013. Non-hazardous duty members are eligible for an unreduced benefit beginning at their normal Social Security retirement age with at least five years of service credit or when the sum of their age and service equals 90. They may retire with a reduced benefit as early as age 60 with at least five years of service credit.
- The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window from January 1 through April 31, 2014. The employee's retirement benefit is funded through mandatory and voluntary contributions made by the employee and HRSD to both the defined benefit and the defined contribution components of the plan. Non-hazardous duty members are eligible for an unreduced benefit beginning at their normal Social Security retirement age with at least five years of service credit or when the sum of their age and service equals 90. They may retire with a reduced benefit as early as age 60 with at least five years of service credit.

Members in Plan 1 and Plan 2 contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. HRSD makes a separate actuarially determined contribution to VRS for all covered employees. The retirement benefit for members in the HRP is funded through mandatory and voluntary contributions made by the member and HRSD to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

Members in Plan 1 and Plan 2 earn creditable service for each month they are employed in a covered position, and vest when they have at least five years (60 months) of creditable service. Members in the HRP earn one month of service credit for each month they are employed in a covered position for the defined benefit component, and service credits are used to determine vesting for the employer contribution portion of the plan. HRP members are always 100% vested in the defined contributions they make, and upon retirement or leaving covered employment are eligible to withdraw employer contributions of 50%, 75%, or 100% after two, three, or four years of service, respectively.

The VRS Basic Benefit for Plan 1 and Plan 2 members, and the defined benefit component for HRP members, is a lifetime monthly benefit based on a retirement multiplier as a percentage of the member's average final compensation multiplied by the member's total service credit. Under Plan 1, average final compensation is the average of the member's 36 consecutive months of highest compensation. Under Plan 2 and the HRP, average final compensation is the average of the member's 60 consecutive months of highest compensation. The retirement multiplier for non-hazardous duty members in Plan 1 is 1.7%; in Plan 2 the multiplier is 1.7% for service earned, purchased or granted prior to January 1, 2013 and 1.65% after that date. The multiplier is 1% for members in the HRP. At retirement, members can elect the Basic Benefit, the Survivor Option, a Partial Lump-Sum Option Payment (PLOP) or the Advance Pension Option. A retirement reduction factor is applied to the Basic Benefit amount for members electing the Survivor Option, PLOP or Advance Pension Option or those retiring with a reduced benefit.

Retirees are eligible for an annual cost-of-living adjustment (COLA) effective July 1 of the second calendar year of retirement. Under Plan 1, the COLA cannot exceed 5%; under Plan 2 and for the HRP defined benefit component, the COLA cannot exceed 3%. During years of no inflation or deflation there is no COLA adjustment. The VRS also provides death and disability benefits.

#### Employees Covered by Benefit Terms

|  | Number           |
|--|------------------|
| Inactive Members or Their Beneficiaries Currently Receiving Benefits | 287              |
| Inactive Members Vested Non-Vested Active Elsewhere in VRS           | 110<br>183<br>82 |
| Total Inactive Members   | 375              |
| Active Members   | 750              |
| Total  | 1,412            |

#### Contributions

The contribution requirement for active employees is governed by Section 51.1-145 of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5% of their compensation toward their retirement. Prior to July 1, 2012, all or part of the 5% member contribution may have been assumed by the employer. Beginning July 1, 2012, new employees were required to pay the 5% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution. HRSD's contractually required contribution rate for the year ended June 30, 2015 was 8.96% of covered compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2014.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Employer contributions to the pension plan were \$4,207,000 and \$4,114,000 for the years ended June 30, 2015 and June 30, 2014, respectively.

#### **Net Pension Liability**

HRSD's net pension liability as of June 30, 2015 was measured as of June 30, 2014. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2013, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2014.

#### **Actuarial Assumptions**

The total pension liability for employees in HRSD's retirement plan was based on an actuarial valuation of June 30, 2013, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2014.

Inflation 2.5%

Salary increases, including inflation 3.5% to 5.35%

Investment rate of return 7%, net of pension plan investment expense, including inflation \*

Cost of living adjustments 2.25 – 2.5%

\* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed return rate for GASB purposes of slightly more than the assumed 7%. However, since the difference was minimal, and a more conservative 7% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7% to simplify preparation of pension liabilities.

Mortality rates: 14% of deaths are assumed to be service related

Pre-Retirement, RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females set back 2 years

Post-Retirement, RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 1 year

Post Disablement, RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set back 3 years and no provision for future mortality improvement

The actuarial assumptions used in the June 30, 2013 valuation were based on the results of an actuarial experience study for the period July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

#### **Long-Term Expected Rate of Return**

The long-term expected rate of return on pension system investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected real rates of return (expected returns, net of pension system investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The asset target allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

| Asset Class (Strategy)                | Target<br>Allocation | Arithmetic<br>Long-Term<br>Expected<br>Rate of Return | Weighted Average Long-Term Expected Rate of Return |
|---------------------------------------|----------------------|---|--|
| · · · · · · · · · · · · · · · · · · · |                      |   |  |
| U.S. Equity                           | 19.50%               | 6.46%   | 1.26%  |
| Developed Non-U.S. Equity             | 16.50%               | 6.28%   | 1.04%  |
| Emerging Market Equity                | 6.00%                | 10.00%  | 0.60%  |
| Fixed Income                          | 15.00%               | 0.09%   | 0.01%  |
| Emerging Debt                         | 3.00%                | 3.51%   | 0.11%  |
| Rate Sensitive Credit                 | 4.50%                | 3.51%   | 0.16%  |
| Non-Rate Sensitive Credit             | 4.50%                | 5.00%   | 0.23%  |
| Convertibles                          | 3.00%                | 4.81%   | 0.14%  |
| Public Real Estate                    | 2.25%                | 6.12%   | 0.14%  |
| Private Real Estate                   | 12.75%               | 7.10%   | 0.91%  |
| Private Equity                        | 12.00%               | 10.41%  | 1.25%  |
| Cash                                  | 1.00%                | -1.50%  | -0.02%   |
| Total                                 | 100.00%              |   | 5.83%  |
|                                       | Inflation            |   | 2.50%  |
| * Expected arithm                     | netic nominal return |   | 8.33%  |

<sup>\*</sup> Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real rate of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44%, including expected inflation of 2.50%.

#### **Discount Rate**

The discount rate used to measure the total pension liability was 7%. The projection of cash flows used to determine the discount rate assumed that VRS member contributions will be made per the VRS statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

#### Changes in Net Pension Liability

|  | Total Pension<br>Liability<br>(a) | Plan Fiduciary<br>Net Position<br>(b) | Net Pension<br>Liability<br>(a) - (b) |  |  |
|--|-----------------------------------|---------------------------------------|---------------------------------------|--|--|
| Balances at June 30, 2014              | \$ 187,685,622                    | \$ 147,501,233                        | \$ 40,184,389                         |  |  |
| Changes for the year                   |                                   |                                       |                                       |  |  |
| Service cost                           | 3,942,732                         | -                                     | 3,942,732                             |  |  |
| Interest                               | 12,906,739                        | -                                     | 12,906,739                            |  |  |
| Changes of assumptions                 | -                                 | -                                     | -                                     |  |  |
| Difference between expected and actual | -                                 | -                                     | -                                     |  |  |
| experience                             |                                   |                                       | -                                     |  |  |
| Contributions - Employer               | -                                 | 4,113,513                             | (4,113,513)                           |  |  |
| Contributions - Employee               | -                                 | 2,267,351                             | (2,267,351)                           |  |  |
| Net investment income                  | -                                 | 23,312,851                            | (23,312,851)                          |  |  |
| Benefit payments, including refunds of |                                   |                                       | -                                     |  |  |
| employee contributions                 | (6,607,274)                       | (6,607,274)                           | -                                     |  |  |
| Administrative expense                 | -                                 | (124,584)                             | 124,584                               |  |  |
| Other changes                          |                                   | 1,228                                 | (1,228)                               |  |  |
| Net changes                            | 10,242,197                        | 22,963,085                            | (12,720,888)                          |  |  |
| Balances at June 30, 2015              | \$ 197,927,819                    | \$ 170,464,318                        | \$ 27,463,501                         |  |  |

#### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

|                       | Decrease      | Discount Rate | Increase    |
|-----------------------|---------------|---------------|-------------|
|                       | (6.00%)       | (7.00%)       | (8.00%)     |
| Net Pension Liability | \$ 56,632,423 | \$ 27,463,501 | \$3,371,943 |

#### Pension Expenses and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2015, HRSD recognized pension expense of \$1,792,631. At June 30, 2015, HRSD reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

|   | rred Outflows<br>Resources | Deferred Inflows of Resources |            |  |
|---|----------------------------|-------------------------------|------------|--|
| Differences between expected and actual experience<br>Changes of assumptions  | \$<br>-                    | \$                            | -          |  |
| Net difference between projected and actual earnings on plan investments  Employer contributions subsequent to the measurement date | 4.207.000                  |                               | 10,400,000 |  |
| 2p.oyor contributions capaciquent to the measurement date   | \$<br>4,207,000            | \$                            | 10,400,000 |  |

HRSD's contributions subsequent to the measurement date in the amount of \$4,207,000 are reported as deferred outflows of resources, pension contributions subsequent to measurement date, and will be recognized as a reduction of the Net Pension Liability in the year ended June 30, 2016. Deferred inflows of resources in the amount of \$10,400,000 for the net difference between projected and actual earnings on pension plan investments will be recognized in pension expense as follows:

|      |       | _    |            |
|------|-------|------|------------|
| Vear | bahna | luna | $30 \cdot$ |

| 2016       | \$<br>2,600,000 |
|------------|-----------------|
| 2017       | 2,600,000       |
| 2018       | 2,600,000       |
| 2019       | 2,600,000       |
| Thereafter | -               |

#### Annual Pension Cost as related to the fiscal year ended June 30, 2014

Prior to the adoption of GASB Statement No. 68, HRSD reported annual pension costs as determined by an actuarial valuation as of June 30, 2013. For the year ended June 30, 2014, the annual pension cost of \$4,107,000 for VRS was equal to the required and actual contributions.

| Fiscal Year ending |    | Annual<br>Pension<br>Cost (APC) | Percentage<br>of APC<br>Contributed | Net Pe<br>Oblig |   |
|--------------------|----|---------------------------------|-------------------------------------|-----------------|---|
| 6/30/2014          | \$ | 4,107,000                       | 100%                                | \$              | - |
| 6/30/2013          |    | 4,075,000                       | 100%                                |                 | - |
| 6/30/2012          |    | 4,580,000                       | 100%                                |                 | - |

The FY14 required contribution was determined as part of the June 30, 2011 actuarial valuation using the entry age normal actuarial cost method. The actuarial assumptions at June 30, 2011 included (a) an investment rate of return of 7%, (b) projected salary increases ranging from 3.75% to 5.60%, and (c) a cost of living adjustment of 2.5% per year for Plan 1 employees and 2.25% per year for Plan 2 employees. Both the investment rate of return and the projected salary increases include an inflation component of 2.5%.

The actuarial value of the HRSD assets is equal to the modified market value of assets. This method uses techniques that smooth the effects of short-term volatility in the market value of assets over a five-year period. The \$47,444,000 unfunded actuarial accrued liability was being amortized as level percentage of projected payroll on a closed basis. The remaining amortization period at June 30, 2013 for the unfunded actuarial accrued liability was 30 years.

#### **NOTE 8 – LONG-TERM DEBT**

HRSD issues revenue bonds for various capital improvements including but not limited to wastewater treatment plants and interceptor system improvements. In addition to HRSD's publicly issued revenue bonds, HRSD is indebted for bond issues payable to the Virginia Resources Authority (VRA) as administrator of the Virginia Water Facilities Fund. HRSD is required to adhere to and is in compliance with the rebate and reporting requirements of the federal regulations pertaining to arbitrage.

In fiscal year 2015, HRSD issued \$111.3 million in wastewater revenue refunding bonds to provide funds to refund portions of the HRSD Series 2008, 2011, and 2012A wastewater revenue bonds. The refunding resulted in a reduction of total debt service payments of \$14,913,000, created an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$11,144,000 and resulted in a deferred loss on the bond refunding of \$13,596,000, which is being amortized over 15 years.

HRSD has outstanding \$25 million in subordinate variable rate demand bonds to partially finance its capital improvement plan. The bonds may bear interest in either a Weekly Period or a Long-term Period as defined. The bonds were initially issued in a Weekly Interest Period and bear interest at a varying interest rate until, at HRSD's option, they are converted to the Long-term Period. Liquidity to pay the purchase price of the bonds that are tendered and not remarketed is provided by HRSD. Therefore, while it is the intention of HRSD to hold the bonds to maturity, the bonds are shown as current obligations for financial statement purposes. Maturities of the principal and interest for these bonds are shown below as if held to maturity. The bonds are subject to optional redemption by HRSD prior to their maturity. Through June 30, 2015, the bonds have been successfully remarketed by the Remarketing Agent. The interest rate for the bonds at June 30, 2015 was 0.04%, and is used to calculate interest maturity amounts shown below.

All bonds are secured by the revenues of HRSD and are payable over the duration of that issue. A summary of activity for the years ended June 30 is as follows:

|                              | Balance at | Balance at       |                   |            |                  |                   | Balance at | Due within |
|------------------------------|------------|------------------|-------------------|------------|------------------|-------------------|------------|------------|
| (in thousands)               | 6/30/13    | <u>Additions</u> | <u>Deductions</u> | 6/30/14    | <u>Additions</u> | <b>Deductions</b> | 6/30/2015  | One year   |
| Series-2014                  | \$ -       | \$ -             | \$ -              | \$ -       | \$ 111,345       | \$ -              | \$ 111,345 | \$ -       |
| Series-2012 A                | 130,480    | -                | (2,205)           | 128,275    | -                | (16,360)          | 111,915    | 2,385      |
| Series-2012 Subordinate      | 21,115     | -                | (6,015)           | 15,100     | -                | (6,145)           | 8,955      | 4,925      |
| Series-2011FR                | 43,930     | -                | (1,480)           | 42,450     | -                | (9,905)           | 32,545     | 1,320      |
| Series-2011VR                | 25,000     | -                | -                 | 25,000     | -                | -                 | 25,000     | 25,000     |
| Series-2009A                 | 6,675      | -                | (3,275)           | 3,400      | -                | (3,400)           | -          | -          |
| Series-2009B                 | 134,725    | -                | -                 | 134,725    | -                | -                 | 134,725    | 3,505      |
| Series-2008                  | 213,170    | -                | (2,000)           | 211,170    | -                | (97,760)          | 113,410    | 2,000      |
| Series-2003                  | 13,400     | -                | (4,295)           | 9,105      | -                | (4,460)           | 4,645      | 4,645      |
| Virginia Resources Authority |            |                  |                   |            |                  |                   |            |            |
| Senior bonds                 | 104,010    | 5,356            | (4,384)           | 104,982    | -                | (4,562)           | 100,420    | 4,703      |
| Subordinate bonds            | 74,116     |                  | (4,366)           | 69,750     |                  | (4,510)           | 65,240     | 4,652      |
|                              | 766,621    | 5,356            | (28,020)          | 743,957    | 111,345          | (147,102)         | 708,200    | 53,135     |
| Unamortized bond premiums    | 23,882     |                  | (1,486)           | 22,396     | 24,300           | (6,499)           | 40,197     | 3,483      |
| Total Bonds Outstanding      | \$ 790,503 | \$ 5,356         | \$ (29,506)       | \$ 766,353 | \$ 135,645       | \$ (153,601)      | \$ 748,397 | \$ 56,618  |

A summary of the senior bonds outstanding at June 30, 2015 is as follows:

|                | Issue      | Principal Outstanding |    |         |    | Ir       | terest to | Interest | Duration     |          |                   |
|----------------|------------|-----------------------|----|---------|----|----------|-----------|----------|--------------|----------|-------------------|
| (in thousands) | Amount     | Total                 | (  | Current | Lo | ong-Term | ı         | Maturity | Rates        | of Issue | Final Maturity    |
| Series 2014    | \$ 111,345 | \$<br>111,345         | \$ | -       | \$ | 111,345  | \$        | 52,542   | 0.05         | 15 years | July 1, 2029      |
| Series 2012A   | 130,480    | 111,915               |    | 2,385   |    | 109,530  |           | 90,297   | 2.00 - 5.00% | 30 years | January 1, 2044   |
| Series-2011FR  | 45,705     | 32,545                |    | 1,320   |    | 31,225   |           | 19,351   | 2.00 - 5.00% | 30 years | November 1, 2034  |
| Series-2009B   | 134,725    | 134,725               |    | 3,505   |    | 131,220  |           | 111,491  | 3.38 - 5.86% | 30 years | November 1, 2039  |
| Series-2008    | 223,170    | 113,410               |    | 2,000   |    | 111,410  |           | 102,652  | 3.00 - 5.00% | 30 years | July 1, 2038      |
| Series-2003    | 55,890     | 4,645                 |    | 4,645   |    | -        |           | 93       | 3.34 - 5.00% | 12 years | October 1, 2015   |
| VRA - Metering | 9,989      | 8,638                 |    | 416     |    | 8,222    |           | 2,592    | 3.35%        | 20 years | March 1, 2031     |
| VRA - WTP      | 5,727      | 5,001                 |    | 256     |    | 4,745    |           | 1,269    | 2.93%        | 20 years | September 1, 2031 |
| VRA - NTP      | 19,395     | 16,731                |    | 810     |    | 15,921   |           | 4,998    | 3.35%        | 20 years | March 1, 2031     |
| VRA - JRTP     | 13,431     | 11,488                |    | 584     |    | 10,904   |           | 3,298    | 3.35%        | 20 years | March 1, 2031     |
| VRA - ABTP     | 50,000     | 46,002                |    | 2,050   |    | 43,952   |           | 13,098   | 2.93%        | 20 years | September 1, 2032 |
| VRA - BHTP     | 7,584      | 6,629                 |    | 322     |    | 6,307    |           | 1,761    | 2.93%        | 20 years | September 1, 2031 |
| VRA - ATP      | 6,318      | 5,931                 |    | 265     |    | 5,666    |           | 1,476    | 2.31%        | 20 years | February 1, 2033  |
| Total          |            | \$<br>609,005         | \$ | 18,558  | \$ | 590,447  | \$        | 404,918  | =            |          |                   |

Maturities of senior bond principal and interest as of June 30, 2015 are as follows:

| (in thousands) |               |               |
|----------------|---------------|---------------|
| June 30,       | Principal     | Interest      |
| 2016           | \$<br>18,558  | \$<br>28,132  |
| 2017           | 15,279        | 27,556        |
| 2018           | 18,144        | 26,985        |
| 2019           | 18,598        | 26,143        |
| 2020           | 19,353        | 25,328        |
| 2021-2025      | 109,827       | 112,495       |
| 2026-2030      | 135,177       | 84,799        |
| 2031-2035      | 142,769       | 53,071        |
| 2036-2040      | 110,915       | 18,331        |
| 2041-2045      | 20,385        | 2,078         |
|                | \$<br>609,005 | \$<br>404,918 |
|                |               |               |

A summary of the subordinate revenue bonds outstanding at June 30, 2015 is as follows:

|                      |           |           |                |           | Interest  |                |          |                   |
|----------------------|-----------|-----------|----------------|-----------|-----------|----------------|----------|-------------------|
| (in thousands)       | Issue     | Pri       | ncipal Outstan | ding      | to        | Interest       | Duration | Final             |
|                      | Amount    | Total     | Current        | Long-term | Maturity  | Rates          | of Issue | Maturity          |
| Series-2012          | \$ 22,680 | \$ 8,955  | \$ 4,925       | \$ 4,030  | \$ 140    | 0.3% - 1.92%   | 8 years  | October 1, 2020   |
| Disinfection         | 6,490     | 2,103     | 392            | 1,711     | 208       | 3.50%          | 20 years | March 1, 2020     |
| BH Odor              | 2,380     | 964       | 135            | 829       | 122       | 3.50%          | 20 years | September 1, 2021 |
| York River Reuse     | 2,476     | 1,088     | 137            | 951       | 75        | 1.70%          | 20 years | September 1, 2022 |
| AB Aeration          | 1,759     | 815       | 103            | 712       | 57        | 1.70%          | 20 years | October 1, 2022   |
| Ches-Eliz Off Gas    | 1,070     | 507       | 56             | 451       | 84        | 3.75%          | 20 years | March 1, 2023     |
| AB Generator         | 1,235     | 777       | 64             | 713       | 92        | 2.00%          | 20 years | April 1, 2026     |
| Atlantic Expansion   | 7,340     | 4,989     | 370            | 4,619     | 681       | 2.10%          | 20 years | February 1, 2027  |
| Ches-Eliz Expansion  | 40,330    | 27,265    | 2,018          | 25,247    | 3,719     | 2.10%          | 20 years | June 1, 2027      |
| Williamsburg PS      | 1,605     | 1,126     | 80             | 1,046     | 160       | 2.10%          | 20 years | July 1, 2027      |
| York River Expansion | 29,683    | 25,606    | 1,297          | 24,309    | 6,146     | 3.55%          | 20 years | March 1, 2031     |
|                      | •         | 74,195    | 9,577          | 64,618    | 11,484    | -              |          |                   |
|                      |           |           |                |           |           | Variable       |          |                   |
|                      |           |           |                |           |           | (0.04% at      |          |                   |
| Series-2011VR        | 25,000    | 25,000    | 25,000         | -         | 269       | June 30, 2015) | 30 years | November 1, 2041  |
| Total                |           | \$ 99,195 | \$ 34,577      | \$ 64,618 | \$ 11,753 | -              |          |                   |
|                      |           |           |                |           |           |                |          |                   |

Maturities of subordinate bond principal and interest as of June 30, 2015 are as follows:

| (in thousands) |    |          |    |        |
|----------------|----|----------|----|--------|
| June 30,       | P  | rincipal | Ir | terest |
| 2016           | \$ | 9,577    | \$ | 1,619  |
| 2017           |    | 7,592    |    | 1,473  |
| 2018           |    | 5,183    |    | 1,341  |
| 2019           |    | 5,307    |    | 1,217  |
| 2020           |    | 5,435    |    | 1,089  |
| 2021-2025      |    | 23,904   |    | 3,694  |
| 2026-2030      |    | 15,251   |    | 1,166  |
| 2031-2035      |    | 1,946    |    | 90     |
| 2036-2040      |    | -        |    | 50     |
| 2041-2045      |    | 25,000   |    | 14     |
|                | \$ | 99,195   | \$ | 11,753 |
|                |    |          |    |        |

#### **NOTE 9 – NET POSITION**

#### Restricted Portions of Net Position

Restricted for debt service and restricted for debt service reserve fund. HRSD's Trust Agreement requires that funds be set aside for its revenue bond debt service and for a debt service reserve fund when certain debt service coverage and liquidity and ratios are not met.

#### <u>Unrestricted Portion of Net Position</u>

Reserved for Improvement. HRSD's Master Trust Agreement requires a reserve for improvements. There is no specific funding mechanism established by the Trust Agreement. At June 30, 2015 and 2014, \$570,000 and \$8,477,000, respectively, was contained in the unrestricted net position. HRSD was in compliance with all funding requirements of this reserve during the fiscal years ended June 30, 2015 and 2014.

Reserved for Construction. A reserve for the construction program is based on funds designated by HRSD's Commission for such purposes. At June 30, 2015 and 2014, \$2,287,000 and \$55,532,000, respectively, was contained in the unrestricted net position.

#### **NOTE 10 - RISK MANAGEMENT**

HRSD is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; employee dishonesty; injuries to employees; and natural disasters. HRSD purchases commercial insurance for specific types of coverage including property, liability, auto, crime, public officials and worker's compensation. There were no significant reductions in insurance coverage from the prior year. Claim settlements and judgments not covered by commercial insurance are covered by operating resources. The amount of settlements did not exceed insurance coverage for each of the past three years. Claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated.

HRSD has a self-insured health, dental and vision care benefits program for all employees. Certain health claims expenses paid on behalf of each employee during a single policy year are covered by excess loss insurance with a specific stop-loss limit of \$250,000. HRSD also maintains an aggregate insurance policy whereby total medical claims costs in excess of 125 percent of expected costs are subject to reimbursement. Claims processing and payments for all health care claims are made through third-party administrators. HRSD uses the information provided by the third-party administrators and a health care benefits consultant to aid in the determination of self-insurance reserves.

Changes in HRSD's claims liability for fiscal years 2013 through 2015 are as follows:

| (in thousands) | Beg | inning of   | Es | stimated        |    |           | E   | End of   |
|----------------|-----|-------------|----|-----------------|----|-----------|-----|----------|
|                | Fis | Fiscal Year |    | Claims Incurred |    | aims Paid | Fis | cal Year |
| 2013           | \$  | 2,069       | \$ | 10,392          | \$ | (9,862)   | \$  | 2,599    |
| 2014           | \$  | 2,599       | \$ | 10,186          | \$ | (9,914)   | \$  | 2,871    |
| 2015           | \$  | 2,871       | \$ | 11,807          | \$ | (10,362)  | \$  | 4,316    |

#### NOTE 11 - COMMITMENTS AND CONTINGENCIES

HRSD is party to a federal consent decree with the federal and state governments (the Consent Decree), which requires HRSD to evaluate the wet weather capacity of the regional sewer system, including collection systems owned by 13 of the localities which HRSD serves in the Hampton Roads area. Based upon that evaluation, HRSD, in consultation with the localities, is required to develop a regional wet weather management plan (RWWMP) for submittal to the federal and state environmental agencies for their approval. The recommended plan will include an implementation schedule. The RWWMP will identify the attainable level of wet weather capacity in individual areas of the region and/or on a region-wide basis. The RWWMP will also summarize the major projects and programs that must be implemented in order to achieve the specified level of regional wet weather capacity. It is likely that the RWWMP will call for several hundred million dollars in infrastructure investments across the Hampton Roads region over several decades.

HRSD and the localities believe that addressing wet weather capacity issues from a regional perspective will result in the most affordable and cost-effective approach for ratepayers throughout the region. Toward that end, HRSD and the localities entered into a legally binding Memorandum of Agreement in March of 2014 (the MOA). The MOA commits HRSD to (1) develop the RWWMP in consultation with the localities, (2) fund the approved plan through a regional rate imposed on all regional ratepayers, (3) design and construct the necessary improvements, and (4) assume responsibility for wet weather capacity throughout the region in each area once the RWWMP is implemented. In exchange, the localities have agreed to (1) cooperate with HRSD, (2) facilitate the construction of and accept ownership of any improvements which HRSD may need to construct in the localities' systems, and (3) maintain the integrity of their systems to industry standards.

The Consent Decree and MOA also contemplate that the localities' obligation to maintain the integrity of their sewer systems to industry standards was embodied in a State administrative order. While HRSD is preparing the RWWMP, the Consent Decree also requires HRSD to implement approximately \$200 million in priority capital system upgrade projects over a nine year period, which are included in the capital improvement and expansion program noted below. Management currently believes that HRSD is on schedule to complete these projects.

HRSD has a major capital improvement and expansion program funded through the issuance of debt and its own resources. At June 30, 2015 HRSD has outstanding commitments for contracts in progress of approximately \$166,629,000.

#### NOTE 12 - Change in Accounting Principle and Correction of Inventory Value

HRSD has historically expensed items used for the repair and maintenance of it various assets at the time of purchase. These items have been kept in an inventory system used to record maintenance of assets and track the availability of inventory items. Based on a review HRSD has determined that the proper treatment of these inventory items is to recognize the asset when purchased and expense items as used. Under the guidelines of GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, HRSD is treating this adjustment as a correction of an error. The following summarizes the effects of the inventory adjustments on the net position at July 1, 2013 and change in net position as of June 30, 2014:

| (in thousands)  |            |
|---|------------|
| Net position previously reported at June 30, 2013       | \$ 502,989 |
| Correction to record inventory adjustment               | 23,007     |
| Net position as of June 30, 2013, as adjusted           | 525,996    |
| Change in net position previously reported for FY2014   | 26,813     |
| Correction to record inventory adjustment               | 2,138      |
| Change in net position as of June 30, 2014, as adjusted | 28,951     |
| Net position at June 30, 2014, as adjusted              | \$ 554,947 |

As discussed in Note 2, HRSD adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27, and GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date - an amendment of GASB Statement No. 68, effective July 1, 2014. HRSD implemented the provisions of GASB Statements No. 68 and No. 71 in fiscal year 2015 by adjusting the July 1, 2014 net position, establishing a pension liability, recording deferred inflows and outflows of resources related to pension activity, and adjusting pension expenses in the accompanying financial statements. The following reflects the adjustment to net position as of July 1, 2014 as a result of implementing GASB Statements No. 68 and No. 71 in FY15:

| (in thousands)                                      |               |
|---|---------------|
| Net position as of July 1, 2014, as adjusted        | \$<br>554,947 |
| Adjustment for net pension liability                | (40,184)      |
| Adjustment for pension contributions made in FY2014 | 4,113         |
| Net position at July 1, 2014, adjusted              | \$<br>518,876 |

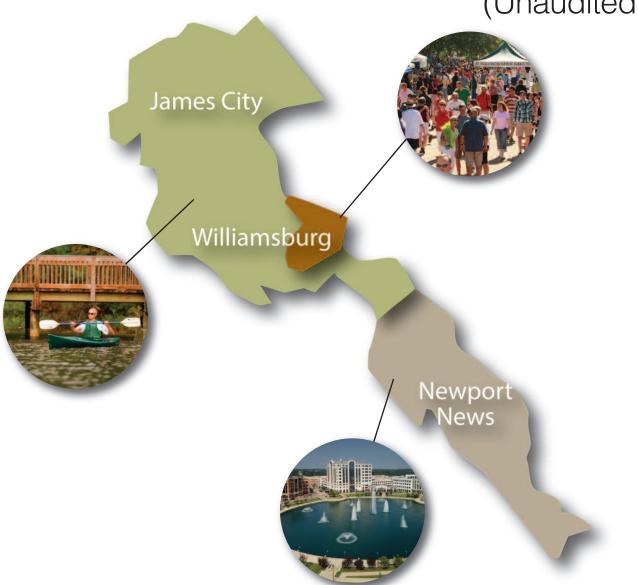
#### **NOTE 13 – Subsequent Event**

On October 30, 2015, HRSD closed on a \$90 million credit agreement (the Agreement) that provides interim financing for the capital improvement program. The Agreement will be available through June 30, 2016, with the option for an extension upon mutual agreement. Interest is based on 70 percent of the 1-month London Interbank Offered Rate (LIBOR) rate plus 0.35 percent per annum.

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# Required Supplementary Information

(Unaudited)



James City County offers much to area residents and visitors including opportunities to enjoy some of the best outdoor activities in the region.

**Newport News** City Center at Oyster Point is a business district that features retail shops, restaurants and offices as well as residential space centered around the fountain in the heart of the development.

Williamsburg Farmers Market, voted one of America's Favorite Markets, attracts residents and visitors alike to Merchants Square to buy locally grown produce from local farmers.

#### HAMPTON ROADS SANITATION DISTRICT REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) JUNE 30, 2015

The tables below provide detail on the changes in HRSD's Net Pension Liability and Employer Contributions for the Virginia Retirement System Retirement Plan

#### SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

|   |    | 2014                    |
|---|----|-------------------------|
| Total pension liability Service cost Interest   | \$ | 3,942,732<br>12,906,739 |
| Benefit payments, including refunds of employee contributions                         |    | (6,607,274)             |
| Net change in total pension liability   |    | 10,242,197              |
| Total pension liability - beginning   | \$ | 187,685,622             |
| Total pension liability - ending (a)  | Φ  | 197,927,819             |
| Plan fiduciary net position   |    |                         |
| Contributions - employer  | \$ | 4,113,513               |
| Contributions - employee  |    | 2,267,351               |
| Net investment income   |    | 23,312,851              |
| Benefit payments, including refunds of employee contributions                         |    | (6,607,274)             |
| Administrative expense  |    | (124,584)               |
| Other   |    | 1,228                   |
| Net change in plan fiduciary net position   |    | 22,963,085              |
| Plan fiduciary net position - beginning   |    | 147,501,233             |
| Plan fiduciary net position - ending (b)  | \$ | 170,464,318             |
| Net pension liability - ending (a) - (b)  | \$ | 27,463,501              |
| Plan fiduciary net position as a percentage of the total pension liability (b)/(a)    |    | 86.12%                  |
| Covered-employee payroll ( c )  | \$ | 51,128,220              |
| Net pension liability as a percentage of the covered-employee payroll ((a)-(b))/( c ) |    | 53.71%                  |

## SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR THE FISCAL YEAR ENDED JUNE 30, 2015

|      |                  | Contributions in Relation to |       |                |    |                   | Contributions as a % |
|------|------------------|------------------------------|-------|----------------|----|-------------------|----------------------|
| Actu | arially Required | <b>Actuarially Required</b>  | C     | Contribution   | En | nployer's Covered | of Covered           |
| C    | Contribution     | Contribution                 | Defic | iency (Excess) | Е  | mployee Payroll   | Employee Payroll     |
|      |                  |                              |       |                |    |                   |                      |
| \$   | 4,207,444        | \$ 4,207,444                 | \$    | -              | \$ | 51,128,220        | 8.23%                |

Unaudited – See accompanying independent auditors' report and notes to required supplementary information

## HAMPTON ROADS SANITATION DISTRICT NOTES TO REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) JUNE 30, 2015

- 1. Changes of benefit terms There have been no significant changes to the VRS benefit provisions since the prior actuarial valuation. A hybrid plan with changes to the defined benefit plan structure and a new defined contribution component were adopted in 2012. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. The liabilities presented do not reflect the hybrid plan since it covers new members joining VRS after the valuation date of June 30, 2013, and the impact on the liabilities as of the measurement date of June 30, 2014 are minimal.
- 2. **Changes of assumptions** The following changes in actuarial assumptions were made effective June 30, 2013 based on the most recent experience study of the retirement system for the four-year period ending June 30, 2012:
  - Update mortality table
  - Decrease in rates of service retirement
  - Decrease in rates of disability retirement
  - Reduce rates of salary increase by 0.25% per year
- 3. **Actuarily determined contributions assumptions** The following significant methods and assumptions were used in calculating the actuarially determined contributions for the year ended June 30, 2015:

Valuation date June 30, 2013
Actuarial cost method Entry Age Normal

Amortization method Level Percent of Pay, Closed
Remaining amortization period 30 Years, beginning June 30, 2013
Asset valuation method Five-Year Smoothed Market Value

Payroll growth rate 3%

Projected salary increases\* 3.50% to 5.35%

Investment rate of return\* 7%

Cost-of-living adjustments

 A) Plan 1 Members
 2.50%

 B) Plan 2 Members
 2.25%

Unaudited – See accompanying independent auditors' report and notes to required supplementary information

<sup>\*</sup> includes inflation at 2.5%

### HAMPTON ROADS SANITATION DISTRICT SCHEDULES OF FUNDING PROGRESS

#### SCHEDULE OF FUNDING PROGRESS - OTHER POST-RETIREMENT HEALTH BENEFITS

The table below provides detail on the funding progress for the Post-Retirement Health Benefit Plan for HRSD

|                    |                                 | Actuarial                     |                                     | Funded<br>Ratio                    |                              | UAAL as a<br>% of               |
|--------------------|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|------------------------------|---------------------------------|
| Valuation as<br>of | Actuarial<br>Value of<br>Assets | Accrued<br>Liability<br>(AAL) | Unfunded<br>AAL (UAAL)<br>(2) - (1) | Assets as %<br>of AAL<br>(1) / (2) | Annual<br>Covered<br>Payroll | Covered<br>Payroll<br>(3) / (5) |
| (in thousands)     | (1)                             | (2)                           | (3)                                 | (4)                                | (5)                          | (6)                             |
| 6/30/2015          | \$37,008                        | \$42,017                      | \$5,009                             | 88.1%                              | \$47,674                     | 10.5%                           |
| 6/30/2014          | \$34,115                        | \$39,422                      | \$5,307                             | 86.5%                              | \$46,096                     | 11.5%                           |
| 6/30/2013          | \$28,030                        | \$35,552                      | \$7,522                             | 78.8%                              | \$45,032                     | 16.7%                           |
| 6/30/2012          | \$24,515                        | \$32,577                      | \$8,062                             | 75.3%                              | \$43,213                     | 18.7%                           |
| 6/30/2011          | \$22,560                        | \$32,076                      | \$9,516                             | 70.3%                              | \$40,553                     | 23.5%                           |

#### **SCHEDULE OF FUNDING PROGRESS - PENSION**

As of June 30, 2013, the most recent actuarial valuation date related to the June 30, 2014 fiscal year end, the plan was 74.7% funded. The actuarial accrued liability for benefits was \$140,242,000, and the actuarial value of assets was \$187,686,000, resulting in an unfunded actuarial accrued liability (UAAL) of \$47,444,000. The covered payroll (annual payroll of active employees covered by the plan) was \$45,044,000, and the ratio of the UAAL to the covered payroll was 105.3%.

The following schedule of funding progress (unaudited required supplementary information) presents multiyear trend information about whether the actuarial value of the plan assets is increasing or decreasing over time relative to the actuarial liability for benefits.

The amounts shown below are a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases and step-rate benefits estimated to be payable in the future as a result of employee service to date. This measure is the actuarial present value of credited projected benefits and is intended to help assess the VRS funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among employers. The measure is independent of the funding method used to determine contributions to the VRS.

|  | <br>Valuation date June 30, 2013 2012 2011 |    |                              |    |                              |  |  |  |
|--|--|----|------------------------------|----|------------------------------|--|--|--|
| Actuarial value of assets<br>Actuarial accrued liability<br>Amount underfunded | \$<br>187,686<br>140,242<br>47,444         | \$ | 183,384<br>133,331<br>50,053 | \$ | 174,448<br>132,919<br>41,529 |  |  |  |
| Funded ratio Annual covered payroll Amount underfunded                         | \$<br>74.7%<br>45,044<br>105.3%            | \$ | 72.7%<br>42,166<br>118.7%    | \$ | 76.2%<br>40,462<br>102.6%    |  |  |  |

Unaudited – See accompanying independent auditors' report and notes to required supplementary information

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# Statistical Section

(Unaudited)



**Gloucester County** Historic Courthouse, home of the Daffodil Festival, combines history and beauty.

Hampton Located on the mouth of the Chesapeake Bay, Hampton is graced with miles of shoreline and breathtaking water views. Residents and businesses alike choose to call this beautiful city home.

**Poquoson** It was the water that brought the first settlers to Poquoson. The name of the city is a Native American word which roughly translates to "great marsh."

York County Yorktown is most remembered as the site where British General Lord Cornwallis surrendered to American and French forces under the command of General George Washington, bringing an end to the last major battle of the American Revolutionary War. But even before the struggle for independence, the town was a bustling and prosperous 18th century seaport, having been established by the 1691 Act of Ports. Yorktown also witnessed major Civil War activity. Its fortifications held off a Union army attack during the Peninsula Campaign of 1862.

## HAMPTON ROADS SANITATION DISTRICT STATISTICAL SECTION (UNAUDITED)

This section of Hampton Roads Sanitation District's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures and required supplementary information says about HRSD's overall financial health.

| Contents  | Page           |
|---|----------------|
| Demographic and Economic Information  This schedule offers demographic and economic indicators to help the reader understand the environment within which HRSD's financial activities take place and to help make comparisons over time and with other governments. | 45             |
| Financial Trends  These schedules contain trend information to help the reader understand how HRSD's financial performance and well-being have changed over time.   | 46-48          |
| Debt Capacity  This schedule presents information to help the reader assess the affordability of HRSD's current levels of outstanding debt and HRSD's ability to issue additional debt in the future.   | 49             |
| Revenue Capacity  These schedules contain information to help the reader assess the factors affecting HRSD's ability to generate revenue from rate payers.  | 50-51<br>54-56 |
| Operating Information  These schedules contain information about the HRSD's operations and resources to help the reader understand how the HRSD's financial information relates to the services HRSD provides and the activities it performs.                       | 52-53<br>57    |

Unaudited - See accompanying independent auditors' report

**Sources:** Unless otherwise noted the information in these schedules is derived from the comprehensive annual financial reports and accounting records for the relevant year.

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# HAMPTON ROADS SANITATION DISTRICT DEMOGRAPHIC AND OTHER MISCELLANEOUS STATISTICS JUNE 30, 2015

| Date of Incorporation - 1940  Area in Square Miles  Present Service Area in Square Miles | Miles                  | 3,118         | 3,118<br>672  | 3,118<br>672  | 3,118<br>672  | 3,118         | 3,118<br>672  | 3,118         | 3,118 |      | 3,118<br>672 |
|--|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|------|--------------|
| Treatment Plants (Major) Plant Capacity (Millions of Gallons per Day)                    | is per Day)            | ත <u>;</u>    | o .           | o ;           | <b>ග</b> ්    | ත <u>;</u>    | ත <u>;</u>    | თ <u>'</u>    |       | o :  |              |
| Army Base Plant, Norfolk   | c                      | 18.0          | 18.0          | 18.0          | 18.0          | 18.0          | 18.0          | 18.0          | •     | 18.0 |              |
| Boat Harbor Plant, Newport News  | -<br>News              | 25.0          | 25.0          | 25.0          | 25.0          | 25.0          | 25.0          | 25.0          | , , , | 25.0 |              |
| Chesapeake-Elizabeth Plant, Virginia Beach   | ., Virginia Beach      | 24.0          | 24.0          | 24.0          | 24.0          | 24.0          | 24.0          | 24.0          | N     | 4.0  |              |
| James River Plant, Newport News  | News                   | 20.0          | 20.0          | 20.0          | 20.0          | 20.0          | 20.0          | 20.0          | N     | 0.0  |              |
| Nansemond Plant, Suffolk   |                        | 30.0          | 30.0          | 30.0          | 30.0          | 30.0          | 30.0          | 30.0          | m     | 0.0  |              |
| Virginia Initiative Plant, Norfolk   | ok<br>S                | 40.0          | 40.0          | 40.0          | 40.0          | 40.0          | 40.0          | 40.0          | 4     | 0.0  |              |
| Williamsburg Plant, James City County  | City County            | 22.5          | 22.5          | 22.5          | 22.5          | 22.5          | 22.5          | 22.5          | N     | 2.5  |              |
| York River Plant, York County Total Treatment Plants (Maior) Canacity                    | ty<br>anacitv          | 15.0<br>248 5 | 15.0<br>230.5 | ر ب   | 5.0  | •            |
|  | pacity                 | 5             | 5             | 5             | 5             | 5             | 5             | 5             | 1     | 9    | •            |
| Small Communities Treatment Plants   | lants                  | 4             | 4             | 4             | 2             | 2             | 4             | 4             | •     | ₹†   |              |
| Central Middlesex, Middlesex County  | x County               | 0.025         | 0.03          | 0.03          | 0.03          | 0.03          |               |               | •     |      |              |
| King William Plant, King William County  | liam County            | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | Ö     | 10   |              |
| Mathews Plant, Mathews County (1)  | unty (1)               |               | 1             | 1             | 0.10          | 0.10          | 0.10          | 0.10          | 0.    | 0    |              |
| Urbanna Plant, Middlesex County  | ounty                  | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.1   | 0    |              |
| West Point Plant, King William County  | am County              | 0.60          | 09.0          | 09.0          | 09.0          | 09.0          | 09.0          | 09.0          | 0.6   | 0    |              |
| Total Small Communities Treatment Plants Capacity  | ent Plants Capacity    | 0.825         | 0.83          | 0.83          | 0.93          | 0.93          | 0.90          | 06.0          | 0.9   | _    |              |
| Miles of Interceptor Systems (2)   |                        | 532           | 531           | 531           | 532           | 528           | 483           | 483           | 514   |      |              |
| Interceptor Pump Stations  |                        | 83            | 83            | 83            | 83            | 82            | 81            | 82            | 82    |      |              |
| Small Communities Pump Stations (2)  | ns (2)                 | 33            | 33            | 29            | 29            | 29            | 25            | 20            | 20    |      |              |
| Maintenance Facilities   |                        | 2             | 2             | 2             | 7             | 2             | 2             | 2             | 2     |      | 2            |
| Number of Service Connections (in thousands) (3)   | (in thousands) (3)     | 465           | 462           | 460           | 458           | 457           | 455           | 452           | 442   |      | 461          |
| Daily Average Treatment in Millions of Gallons   | ons of Gallons         | 152           | 154           | 158           | 147           | 144           | 171           | 151           | 146   |      | 163          |
| Bond Ratings   |                        | (             |               |               |               |               |               | •             | •     |      |              |
| Moody's Investors Service  | Senior                 | AaZ           | Aaz           | Aaz           | Aaz           | Aaz           | Aaz           | Aa3           | Aa3   |      |              |
| Standard & Poor's  | Senior                 | AA+           | AAA           | AAA           | AAA           | AAA           | AAA           | AA+           | AA+   |      |              |
|  | Subordinate Long-term  | Ą             | AA+           | AA+           | AA+           | ,             | ,             |               | •     |      |              |
|  | Subordinate Short-term | A-1+          | A-1+          | A-1+          | A-1+          | 1             | 1             |               | 1     |      |              |
| Fitch  | Senior                 | AA+           | AA+           | AA+           | AA+           | AA+           | AA+           | ΑĄ            | AA    |      |              |
|  | Subordinate Long-term  | Ą             | ΑA            | ΑA            | ΑA            |               |               |               | •     |      |              |
|  | Subordinate Short-term | F1+           | <del>+</del>  | F1+           | F1+           |               |               |               |       |      |              |

The Mathews Treatment Plant has been closed. Wastewater from the area is now handled by the York River Treatment Plant.
 HRSD conducted evaluations of the system during the years ended June 30, 2009 and 2011 and revised the miles of pipes and the number of small community pump stations.
 HRSD installed a new customer billing system during the year ended June 30, 2008. As part of the implementation, certain accounts were combined to more closely align billing locations and service delivery, resulting in fewer total accounts.

#### HAMPTON ROADS SANITATION DISTRICT SCHEDULE OF OPERATING EXPENSES, NET POSITION BY COMPONENT AND DEBT SERVICE EXPENDITURES LAST TEN FISCAL YEARS

| (in thousands)                             | 2015              | (adjusted<br>2014 | l) (adjusted)<br>2013 |    | (adjusted)<br>2012 |
|--|-------------------|-------------------|-----------------------|----|--------------------|
| OPERATING REVENUES                         | Ф 224 G           | DC                | ¢ 100.210             | ф  | 104 017            |
| Wastewater treatment charges Miscellaneous | \$ 221,62<br>3,93 |                   | . ,                   |    | 194,817<br>2,996   |
| TOTAL OPERATING REVENUES                   | 225,56            |                   |                       |    | 197,813            |
| TOTAL OF ERATING REVENUES                  | 220,00            | 213,101           | 202,013               |    | 197,013            |
| OPERATING EXPENSES                         |                   |                   |                       |    |                    |
| Wastewater treatment                       | 114,13            | 37 109,149        | 86,973                |    | 110,783            |
| General and administrative                 | 38,67             |                   | 31,410                |    | 31,163             |
| Depreciation                               | 41,87             | 71 42,761         | 45,414                |    | 41,250             |
| TOTAL OPERATING EXPENSES                   | 194,68            | 86 184,922        | 163,797               |    | 183,196            |
| OPERATING INCOME (LOSS)                    | 30,87             | 75 30,259         | 38,818                |    | 14,617             |
| NONOPERATING REVENUES (EXPENSES)           |                   |                   |                       |    |                    |
| Wastewater facility charges                | 7,42              |                   |                       |    | 6,276              |
| Investment income                          | 1,69              | 95 1,872          | 1,705                 |    | 1,681              |
| Bond interest subsidy                      | 2,44              | 44 2,364          | 2,602                 |    | 2,602              |
| Bond issuance costs                        | (76               | - 68)             | (658                  | )  | (2,206)            |
| Change in fair value of investments        | (28               | 36) (422          |                       |    | (224)              |
| Disposal of capital assets                 |                   | -                 | (1,649                |    | -                  |
| Interest expense                           | (22,95            |                   |                       |    | (22,760)           |
| NET NONOPERATING REVENUES (EXPENSES)       | (12,44            | 45) (15,196       | ) (17,193             | )  | (14,631)           |
| INCOME (LOSS) BEFORE CONTRIBUTIONS         | 18,43             | 30 15,063         | 21,625                |    | (14)               |
| CAPITAL CONTRIBUTIONS                      |                   |                   |                       |    |                    |
| State capital grants                       | 16,5              | 19 13,888         | 10,172                |    | 14,806             |
| Other capital contributions                | 3,00              | - 00              | -                     |    | -                  |
| CHANGE IN NET POSITION                     | \$ 37,94          | 49 \$ 28,951      | \$ 31,797             | \$ | 14,792             |
| NET POSITION                               |                   |                   |                       |    |                    |
| Net investment in capital assets           | \$ 385,59         | 97 \$ 351,191     | \$ 337,342            | \$ | 348,407            |
| Restricted for debt service                | 22,0              |                   |                       |    | 15,736             |
| Restricted for debt service reserve fund   | 44,1              | •                 | ,                     |    | -                  |
| Unrestricted                               | 105,04            | ,                 |                       |    | 130,056            |
| TOTAL NET POSITION                         | \$ 556,82         | 25 \$ 554,947     | \$ 525,996            | \$ | 494,199            |
| DEBT SERVICE EXPENDITURES                  |                   |                   |                       |    |                    |
| Senior debt                                | \$ 43,84          | 42 \$ 47,331      | \$ 37,574             | \$ | 33,023             |
| Subordinate debt                           | \$ 13,09          |                   | . ,                   | \$ | 13,694             |
|  | <b>4</b> .5,00    | ¥ 11,112          | ¥ 11,210              | Ψ  | . 5,55             |
| Senior debt Coverage                       | 1.9               | 0 1.76            | 2.48                  |    | 1.94               |
| Total debt Coverage                        | 1.4               | 6 1.36            | 1.91                  |    | 1.37               |
|  |                   |                   |                       |    |                    |

#### Notes:

<sup>2013 -</sup> HRSD implemented GASB Statement 65 effective July 1, 2012, which requires expensing bond issuance costs in the year incurred.

<sup>2013 -</sup> HRSD adjusted the financial records to include inventory assets.

<sup>2015 -</sup> HRSD implemented GASB Statements 68 and 71 effective July 1, 2014, which requires recording pension liabilty.

#### HAMPTON ROADS SANITATION DISTRICT SCHEDULE OF OPERATING EXPENSES, NET POSITION BY COMPONENT AND DEBT SERVICE EXPENDITURES LAST TEN FISCAL YEARS

|    | 2011             |    | 2010             |    | 2009             |    | 2008             |    | 2007             | <u> </u> | 2006             |
|----|------------------|----|------------------|----|------------------|----|------------------|----|------------------|----------|------------------|
| \$ | 183,526<br>3,890 | \$ | 167,807<br>3,645 | \$ | 156,642<br>3,088 | \$ | 129,583<br>2,623 | \$ | 118,423<br>3,558 | \$       | 106,208<br>3,419 |
|    | 187,416          |    | 171,452          |    | 159,730          |    | 132,206          |    | 121,981          |          | 109,627          |
|    |                  |    |                  |    |                  |    |                  |    |                  |          |                  |
|    | 103,225          |    | 98,022           |    | 86,850           |    | 72,034           |    | 68,930           |          | 67,496           |
|    | 28,622           |    | 29,435           |    | 28,853           |    | 31,756           |    | 26,070           |          | 21,820           |
|    | 36,191           |    | 30,441           | _  | 28,414           | _  | 27,282           |    | 24,958           |          | 24,509           |
|    | 168,038          |    | 157,898          |    | 144,117          |    | 131,072          |    | 119,958          |          | 113,825          |
|    | 19,378           |    | 13,554           |    | 15,613           |    | 1,134            |    | 2,023            |          | (4,198)          |
|    |                  |    |                  |    |                  |    |                  |    |                  |          |                  |
|    | 5,083            |    | 5,754            |    | 5,086            |    | 8,339            |    | 9,645            |          | 10,526           |
|    | 1,699            |    | 1,541            |    | 3,998            |    | 3,999            |    | 3,363            |          | 2,896            |
|    | 2,602            |    | 1,655            |    | -                |    | -                |    | -                |          | -                |
|    | - (40)           |    | -                |    | -                |    | -                |    | -                |          | (000)            |
|    | (19)<br>-        |    | 40<br>-          |    | 162<br>-         |    | 656<br>-         |    | 994              |          | (868)            |
|    | (20,516)         |    | (19,973)         |    | (15,263)         |    | (5,867)          |    | (4,630)          |          | (4,518)          |
|    | (11,151)         |    | (10,983)         |    | (6,017)          |    | 7,127            |    | 9,372            |          | 8,036            |
|    | 8,227            |    | 2,571            |    | 9,596            |    | 8,261            |    | 11,395           |          | 3,838            |
|    | 16,097           |    | 41,606           |    | 16,678           |    | _                |    |                  |          | _                |
|    | -                |    | 41,000           |    | 10,076           |    | -                |    | -                |          | -                |
| \$ | 24,324           | \$ | 44,177           | \$ | 26,274           | \$ | 8,261            | \$ | 11,395           | \$       | 3,838            |
|    |                  |    |                  |    | _                |    | _                |    |                  |          | _                |
| \$ | 351,618          | \$ | 348,572          | \$ | 319,594          | \$ | 301,760          | \$ | 314,708          | \$       | 282,177          |
| •  | 14,896           | •  | 12,253           | •  | 7,542            | •  | 7,377            | •  | 6,247            | •        | 7,817            |
|    | -                |    | -                |    | -                |    | -                |    | -                |          | -                |
|    | 110,688          |    | 92,053           |    | 81,565           |    | 73,290           |    | 53,211           |          | 72,777           |
| \$ | 477,202          | \$ | 452,878          | \$ | 408,701          | \$ | 382,427          | \$ | 374,166          | \$       | 362,771          |
|    |                  |    |                  |    |                  |    |                  |    |                  |          |                  |
| \$ | 28,257           | \$ | 21,081           | \$ | 17,453           | \$ | 4,699            | \$ | 8,609            | \$       | 8,720            |
| \$ | 10,640           | \$ | 10,695           | \$ | 10,694           | \$ | 11,992           | \$ | 8,009            | \$       | 7,500            |
| Ψ  | 10,040           | Ψ  | 10,000           | Ψ  | 10,004           | Ψ  | 11,002           | Ψ  | 0,000            | Ψ        | 7,000            |
|    | 2.30             |    | 2.51             |    | 3.05             |    | 8.81             |    | 4.76             |          | 3.77             |
|    | 1.67             |    | 1.67             |    | 1.89             |    | 2.48             |    | 2.47             |          | 2.03             |
|    |                  |    |                  |    |                  |    |                  |    |                  |          |                  |

HAMPTON ROADS SANITATION DISTRICT OBJECTIVE CLASSIFICATION OF DEPARTMENTAL EXPENDITURES FOR OPERATIONS - LAST TEN FISCAL YEARS

| (in thousands)                        |     | 2015    |   | 2014    |    | 2013    |   | 2012    |    | 2011    | - • | 2010    |    | 2009    |    | 2008    | 2    | 2007    | ., | 2006    |
|---------------------------------------|-----|---------|---|---------|----|---------|---|---------|----|---------|-----|---------|----|---------|----|---------|------|---------|----|---------|
| Personal Services                     | છ   | 52,357  | s | 50,538  | \$ | 49,361  | s | 47,319  | \$ | 44,284  | \$  | 42,529  | \$ | 40,840  | \$ | 37,333  | \$ 3 | 6,228   | \$ | 32,045  |
| Fringe Benefits                       |     | 18,249  |   | 20,170  |    | 20,039  |   | 17,800  |    | 17,692  |     | 15,217  |    | 12,410  |    |         | _    | 1,106   |    | 8,430   |
| Repairs and Maintenance               |     | 31,451  |   | 22,320  |    | 23,075  |   | 26,057  |    | 21,234  |     | 23,445  |    | 14,176  |    |         | _    | 1,101   | ,- | 3,036   |
| Materials and Supplies                |     | 4,343   |   | 5,764   |    | 5,700   |   | 6,143   |    | 8,381   |     | 6,284   |    | 5,715   |    |         |      | 5,224   |    | 5,153   |
| Transportation                        |     | 1,297   |   | 1,417   |    | 1,376   |   | 1,319   |    | 1,196   |     | 1,009   |    | 972     |    |         |      | 802     |    | 855     |
| Utilities                             |     | 10,503  |   | 11,126  |    | 12,295  |   | 12,027  |    | 11,026  |     | 10,755  |    | 13,218  |    |         | _    |         | ,- | 0,782   |
| Chemicals                             |     | 7,119   |   | 7,752   |    | 7,892   |   | 8,587   |    | 8,084   |     | 7,571   |    | 8,342   |    |         |      |         |    | 6,721   |
| Contractual Services                  |     | 15,127  |   | 14,222  |    | 13,993  |   | 12,312  |    | 11,118  |     | 10,333  |    | 8,642   |    |         |      |         |    | 7,108   |
| Miscellaneous                         |     | 2,880   |   | 1,274   |    | 1,172   |   | 1,324   |    | 1,148   |     | 1,049   |    | 1,028   |    |         |      |         |    | 642     |
| General (1)                           |     | 9,489   |   | 7,578   |    | 6,487   |   | 6,852   |    | 7,684   |     | 9,265   |    | 10,360  |    |         |      |         |    | 4,544   |
| Subtotal, Expense before Depreciation |     | 152,815 |   | 142,161 |    | 141,390 |   | 139,740 |    | 131,847 | ,-  | 27,457  |    | 115,703 |    | 103,790 | 6    |         | ~  | 39,316  |
| Depreciation                          |     | 41,871  |   | 42,761  |    | 45,414  |   | 41,250  |    | 36,191  |     | 30,441  |    | 28,414  |    | 27,282  | 2    | 24,958  | .4 | 24,509  |
| Total Operating Expenses              | မှာ | 194,686 | ↔ | 184,922 | s  | 186,804 | ↔ | 180,990 | ↔  | 168,038 | ٠,  | 157,898 | s  | 144,117 | s  | 131,072 | \$   | 119,958 | \$ | 113,825 |

(1) Includes bad debt expense

### HAMPTON ROADS SANITATION DISTRICT RATIOS OF OUTSTANDING DEBT BY TYPE JUNE 30, 2015

|          |            |               | (  | in thousands) | )  |             |                |
|----------|------------|---------------|----|---------------|----|-------------|----------------|
|          | No. Of     | Senior        |    | Subordinate   |    | Total       | Debt Per       |
| As of    | Service    | Revenue       |    | Revenue       |    | Outstanding | Service        |
| June 30, | Conections | <br>Bonds     |    | Bonds         |    | Debt        | <br>Connection |
| 2015     | 465,000    | \$<br>649,202 | \$ | 99,195        | \$ | 748,397     | \$<br>1,609    |
| 2014     | 462,000    | 656,503       |    | 109,850       |    | 766,353     | 1,659          |
| 2013     | 460,000    | 670,272       |    | 120,231       |    | 790,503     | 1,718          |
| 2012     | 458,000    | 510,951       |    | 128,335       |    | 639,286     | 1,396          |
| 2011     | 457,000    | 450,335       |    | 110,661       |    | 560,996     | 1,228          |
| 2010     | 455,000    | 395,215       |    | 152,103       |    | 547,318     | 1,203          |
| 2009     | 452,000    | 250,165       |    | 109,971       |    | 360,136     | 797            |
| 2008     | 442,000 *  | 255,635       |    | 104,269       |    | 359,904     | 814            |
| 2007     | 461,000    | 35,855        |    | 107,803       |    | 143,658     | 312            |
| 2006     | 457,000    | 43,015        |    | 101,435       |    | 144,450     | 316            |

<sup>\*</sup> During the year ended June 30, 2008, HRSD installed a new customer billing system. As part of the implementation certain accounts were combined to more closely align billing locations and service delivery, resulting in fewer total accounts.

#### HAMPTON ROADS SANITATION DISTRICT RATE SCHEDULE WASTEWATER TREATMENT CHARGES LAST TEN FISCAL YEARS

| Posterial Manual  | 2015          | 2014             | 2013          | 2012       | 2011       | 2010        | 2009       | 2008        | 2007       | 2006        |
|---|---------------|------------------|---------------|------------|------------|-------------|------------|-------------|------------|-------------|
| Residential - Metered   |               |                  |               |            |            |             |            |             |            |             |
| Per CCF * (single step)   | \$ 3.83       | \$ 3.55          | \$ 3.29       | \$ 3.05    | \$ 2.82    | \$ 2.52     | -          | -           | -          | -           |
| First 30 CCF* per 30-day period   | -             | -                | -             | -          | -          | -           | \$ 2.28    | \$ 1.98     | \$ 1.72    | \$ 1.52     |
| In excess of 30 CCF* per 30-day period  | -             | -                | -             | -          | -          | -           | 2.06       | 1.79        | 1.55       | 1.37        |
| Minimum Charges<br>Per day<br>2 CCF* or less per 30-day period  | 0.25          | 0.25             | 0.25          | 0.25       | 0.25       | 0.25        | -<br>6.50  | -<br>5.65   | -<br>4.91  | -<br>4.34   |
| Residential - Unmetered per 30-day period   |               |                  |               |            |            |             |            |             |            |             |
| Flat rate accounts  | 26.32         | 26.32            | 26.32         | 24.40      | 22.56      | 20.16       | -          | -           | -          | -           |
| First toilet  | -             | -                | -             | -          | -          | -           | 10.25      | 8.91        | 7.74       | 6.84        |
| Second toilet   | -             | -                | -             | -          | -          | -           | 6.83       | 5.94        | 5.16       | 4.56        |
| Additional, each  | -             | -                | -             | -          | -          | -           | 3.42       | 2.97        | 2.58       | 2.28        |
| Non-Residential - Special Category  |               |                  |               |            |            |             |            |             |            |             |
| Biochemical Oxygen Demand (BOD)<br>Excess over 250 mg/liter<br>Per mg/liter per CCF<br>Per Hundred Pounds | 0.000612      | 0.001558         | 0.002451<br>- | -<br>46.77 | -<br>39.71 | -<br>35.39  | -<br>31.95 | -<br>27.71  | -<br>24.05 | -<br>22.50  |
| Total Suspended Solids (TSS)<br>Excess over 250 mg/liter<br>Per mg/liter per CCF<br>Per Hundred Pounds    | 0.000417      | 0.001244         | 0.001865<br>- | -<br>36.70 | -<br>34.73 | 30.25       | -<br>28.54 | -<br>24.82  | -<br>22.51 | 20.30       |
| Total Phosphorus (TP) Excess over 6 mg/liter Per mg/liter per CCF Per Hundred Pounds                      | 0.004344      | 0.011714         | 0.012790      | 300.57     | 300.57     | -<br>293.41 | 283.10     | -<br>252.52 | 239.83     | -<br>210.59 |
| Total Kjeldahl Nitrogen (TKN)<br>Excess over 35 mg/liter<br>Per mg/liter per CCF<br>Per Hundred Pounds    | 0.000756      | 0.001752         | 0.002085      | -<br>74.51 | 63.39      | -<br>61.88  | -<br>59.73 | -<br>53.96  | -<br>28.54 | -<br>24.37  |
| Unusual wastes not covered by this schedule   | may be assign | ned a special ra | te.           |            |            |             |            |             |            |             |
| Septic Tank Waste   |               |                  |               |            |            |             |            |             |            |             |
| Per gallon<br>Per each 500 gallons or part thereof  | 0.1267        | 0.1258           | 0.1146        | -<br>48.57 | -<br>44.46 | -<br>38.51  | -<br>35.84 | -<br>31.21  | -<br>28.05 | -<br>25.45  |

\*CCF = 100 Cubic Feet (Approx. 748 gallons)

Note: Rates can be adjusted by the Commission.

#### HAMPTON ROADS SANITATION DISTRICT RATE SCHEDULE WASTEWATER FACILITY CHARGES LAST TEN FISCAL YEARS

|   | 2015      | 2014     | 2013     | 2012     | 2011     | 2010     | 2009     | 2008     | 2007     | 2006     |
|---|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Residential   | \$ 1,895  | \$ 1,895 | \$ 1,895 | \$ 1,895 | \$ 1,715 | \$ 1,715 | \$ 1,655 | \$ 1,607 | \$ 1,540 | \$ 1,465 |
| Commercial/Industrial                                       |           |          |          |          |          |          |          |          |          |          |
| Volume based facility charges                               |           |          |          |          |          |          |          |          |          |          |
| 5/8" Meter  | \$ 1,895  | \$ 1,895 | \$ 1,895 | \$ 1,895 | \$ 1,715 | \$ 1,715 | \$ 1,655 | \$ 1,607 | \$ 1,540 | \$ 1,465 |
| 3/4" Meter  | 4,830     | 4,830    | 4,510    | 2,885    | 2,605    | 2,605    | 2,515    | 2,443    | 2,340    | 2,230    |
| 1" Meter  | 8,170     | 8,170    | 7,630    | 5,370    | 4,850    | 4,850    | 4,685    | 4,548    | 4,350    | 4,150    |
| 1 1/2" Meter  | 17,260    | 17,260   | 16,130   | 13,035   | 11,780   | 11,780   | 11,365   | 11,040   | 10,565   | 10,065   |
| 2" Meter  | 29,420    | 29,420   | 27,490   | 24,420   | 22,065   | 22,065   | 21,290   | 20,681   | 19,785   | 18,855   |
| 3" Meter  | 63,600    | 62,270   | 58,180   | 59,140   | 53,440   | 53,440   | 51,565   | 50,088   | 47,920   | 45,670   |
| 4" Meter  | 115,580   | 106,060  | 99,110   | 110,860  | 100,175  | 100,175  | 96,660   | 93,892   | 89,830   | 85,605   |
| 6" Meter  | 268,250   | 224,650  | 209,920  | 268,675  | 242,780  | 242,780  | 234,260  | 227,556  | 217,710  | 207,470  |
| 8" Meter  | 487,510   | 382,670  | 357,580  | 503,350  | 454,835  | 454,835  | 438,875  | 426,315  | 407,870  | 388,685  |
| 10" Meter   | 774,860   | 587,820  | 540,610  | 819,310  | 740,340  | 740,340  | 714,355  | 693,915  | 663,890  | 632,665  |
| 12" Meter   | 1,131,490 | -        | -        | -        | -        | -        | -        | -        | -        | -        |
| 14" Meter   | 1,558,360 | -        | -        | -        | -        | -        | -        | -        | -        | -        |
| 16" Meter   | 2,056,330 | -        | -        | -        | -        | -        | -        | -        | -        | -        |
| Strength based facility charges (per permitted pound)       |           |          |          |          |          |          |          |          |          |          |
| Biochemical Oxygen Demand (BOD)<br>Excess over 250 mg/liter | \$ 728    | \$ 987   | \$ 928   | -        | -        | -        | -        | -        | -        | -        |
| Total Suspended Solids (TSS)<br>Excess over 250 mg/liter    | 424       | 624      | 587      | -        | -        | -        | -        | -        | -        | -        |
| Total Phosphorus (TP)<br>Excess over 6 mg/liter             | 8,420     | 5,846    | 5,502    | -        | -        | -        | -        | -        | -        | -        |
| Total Kjeldahl Nitrogen (TKN)<br>Excess over 35 mg/liter    | 3,812     | 1,313    | 1,235    | -        | -        | -        | -        | -        | -        | -        |

Note - One charge per connection.

#### HAMPTON ROADS SANITATION DISTRICT TREATMENT PLANT OPERATING SUMMARY LAST TEN FISCAL YEARS (Average Quantity per Day)

|                                     | 2015       | 2014       | 2013       | 2012       | 2011       | 2010       | 2009       | 2008       | 2007       | 2006       |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| District Total                      |            |            |            |            |            |            |            |            |            |            |
| Flow (MGD)<br>Influent (1,000 lbs.) | 152.2      | 154.0      | 157.9      | 147.1      | 144.4      | 170.9      | 151.4      | 146.3      | 163.3      | 157.5      |
| BOD                                 | 286.0      | 288.6      | 274.4      | 254.6      | 273.1      | 275.2      | 300.9      | 332.1      | 346.3      | 357.3      |
| TSS                                 | 198.6      | 204.7      | 198.1      | 200.3      | 205.9      | 210.7      | 203.6      | 211.3      | 224.0      | 225.0      |
| TP                                  | 8.6        | 6.8        | 6.6        | 6.7        | 7.0        | 7.4        | 7.8        | 6.7        | 7.2        | 6.7        |
| TKN                                 | 45.8       | 47.9       | 48.9       | 48.3       | 49.8       | 48.2       | 49.0       | 51.4       | -          | -          |
| Effluent (1,000 lbs.)               |            |            |            |            |            |            |            |            |            |            |
| BOD                                 | 9.9        | 9.6        | 9.3        | 7.5        | 9.3        | 11.5       | 8.7        | 9.2        | 10.9       | 9.6        |
| TSS                                 | 8.9        | 9.1        | 9.3        | 10.5       | 9.2        | 13.1       | 10.5       | 10.8       | 11.5       | 11.0       |
| TP                                  | 1.0        | 1.1        | 1.0        | 1.1        | 1.0        | 1.0        | 1.0        | 1.1        | 1.1        | 1.2        |
| TKN                                 | 9.8        | 11.2       | 12.0       | 10.1       | 12.3       | 14.9       | 13.3       | 11.2       | -          | -          |
| Army Base Plant                     |            |            |            |            |            |            |            |            |            |            |
| Flow (MGD)                          | 9.9        | 10.7       | 11.8       | 10.2       | 10.0       | 12.6       | 10.4       | 9.7        | 11.3       | 11.3       |
| Influent (1,000 lbs.)               |            |            |            |            |            |            |            |            |            |            |
| BOD                                 | 16.4       | 19.0       | 18.5       | 17.4       | 16.9       | 17.0       | 18.1       | 18.9       | 19.5       | 21.7       |
| TSS                                 | 12.5       | 14.2       | 14.4       | 13.7       | 12.9       | 13.5       | 12.9       | 13.0       | 13.8       | 14.4       |
| TP                                  | 0.4        | 0.4        | 0.4        | 0.4        | 0.4        | 0.4        | 0.4        | 0.4        | 0.5        | 0.5        |
| TKN<br>Effluent (1,000 lbs.)        | 2.9        | 3.5        | 3.7        | 3.5        | 3.2        | 3.2        | 3.1        | 3.4        | -          | -          |
| BOD                                 | 0.8        | 0.8        | 0.8        | 0.9        | 0.8        | 1.0        | 0.8        | 1.0        | 0.9        | 0.8        |
| TSS                                 | 0.6        | 0.8        | 0.9        | 0.8        | 1.0        | 1.1        | 0.8        | 1.1        | 0.9        | 0.9        |
| TP                                  | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        | 0.1        |
| TKN                                 | 2.1        | 2.6        | 2.8        | 2.5        | 2.3        | 2.3        | 2.3        | 2.4        | -          | -          |
| Atlantic Plant                      |            |            |            |            |            |            |            |            |            |            |
| Flow (MGD)                          | 30.9       | 25.7       | 26.7       | 29.0       | 29.7       | 30.4       | 26.6       | 26.3       | 29.4       | 30.2       |
| Influent (1,000 lbs.)               | 30.9       | 25.7       | 20.7       | 23.0       | 29.1       | 30.4       | 20.0       | 20.5       | 23.4       | 30.2       |
| BOD                                 | 66.6       | 52.7       | 51.3       | 56.0       | 58.6       | 55.1       | 52.0       | 55.7       | 58.2       | 61.6       |
| TSS                                 | 42.9       | 37.3       | 36.4       | 43.8       | 46.9       | 43.3       | 40.2       | 41.7       | 46.3       | 47.1       |
| TP                                  | 1.5        | 1.3        | 1.3        | 1.5        | 1.8        | 1.8        | 1.9        | -          | -          | -          |
| TKN                                 | 11.4       | 10.4       | 10.5       | 11.7       | 12.3       | 11.3       | 10.5       | 10.7       | -          | -          |
| Effluent (1,000 lbs.)               |            |            |            |            |            |            |            |            |            |            |
| BOD                                 | 3.0        | 2.2        | 2.6        | 2.0        | 3.0        | 2.3        | 1.8        | 1.9        | 2.0        | 2.2        |
| TSS                                 | 2.4        | 2.0        | 1.9        | 1.8        | 2.0        | 2.9        | 2.2        | 2.0        | 2.1        | 2.7        |
| Boat Harbor Plant                   |            |            |            |            |            |            |            |            |            |            |
| Flow (MGD)                          | 14.4       | 14.9       | 15.5       | 13.6       | 12.6       | 16.7       | 13.0       | 11.6       | 14.6       | 13.7       |
| Influent (1,000 lbs.)               |            |            |            |            |            |            |            |            |            |            |
| BOD                                 | 20.0       | 19.2       | 19.3       | 19.9       | 19.4       | 19.9       | 19.9       | 19.6       | 21.4       | 23.6       |
| TSS                                 | 16.3       | 16.7       | 16.0       | 16.9       | 15.6       | 17.5       | 15.2       | 14.6       | 17.3       | 17.4       |
| TP                                  | 0.5        | 0.4        | 0.4        | 0.5        | 0.5        | 0.5        | 0.5        | 0.5        | 0.6        | 0.6        |
| TKN                                 | 3.6        | 3.7        | 3.7        | 3.7        | 3.8        | 3.7        | 3.6        | 3.6        | -          | -          |
| Effluent (1,000 lbs.)               | 0.7        | 0.7        | 0.7        | 0.0        | 0.0        |            | 0.0        | 0.0        | 4-         | 4.0        |
| BOD                                 | 0.7        | 0.7        | 0.7        | 0.6        | 0.6        | 1.1        | 0.6        | 0.9        | 1.5        | 1.3        |
| TSS<br>TP                           | 0.6<br>0.1 | 0.8<br>0.1 | 0.8<br>0.1 | 0.9<br>0.1 | 0.7<br>0.1 | 1.3<br>0.1 | 0.7<br>0.1 | 0.7<br>0.1 | 1.2<br>0.1 | 0.8<br>0.1 |
| TKN                                 | 2.2        | 2.4        | 2.9        | 3.0        | 2.8        | 2.8        | 2.6        | 2.3        | -          | 0.1        |
|                                     |            |            | 2.0        | 0.0        | 2.0        | 2.0        | 2.0        | 2.0        |            |            |
| Chesapeake-Elizabeth                |            | 40.4       | 40.4       | 45.0       | 40.0       | 00.4       | 40.5       | 40.7       | 45.0       | 40.0       |
| Flow (MGD)                          | 16.3       | 19.1       | 18.4       | 15.2       | 16.3       | 20.1       | 19.5       | 18.7       | 15.6       | 16.8       |
| Influent (1,000 lbs.)<br>BOD        | 30.2       | 38.7       | 32.1       | 24.8       | 30.1       | 32.7       | 36.0       | 38.3       | 30.8       | 35.0       |
| TSS                                 | 22.9       | 26.6       | 25.1       | 21.0       | 22.6       | 26.9       | 27.1       | 27.5       | 21.5       | 23.4       |
| TP                                  | 22.9       | 0.8        | 0.8        | 0.7        | 0.7        | 0.8        | 0.9        | 1.0        | 0.7        | 0.9        |
| TKN                                 | 5.1        | 6.7        | 6.4        | 5.4        | 6.1        | 6.2        | 6.9        | 7.2        | -          | -          |
| Effluent (1,000 lbs.)               |            |            | 1          |            |            |            |            |            |            |            |
| BOD                                 | 2.0        | 2.5        | 2.2        | 1.5        | 1.8        | 2.2        | 2.1        | 2.0        | 1.9        | 1.7        |
| TSS                                 | 1.8        | 1.9        | 2.1        | 1.8        | 1.9        | 2.2        | 2.2        | 2.1        | 1.7        | 2.1        |
| TP                                  | 0.1        | 0.1        | 0.2        | 0.1        | 0.2        | 0.2        | 0.2        | 0.2        | 0.2        | 0.2        |
| TKN                                 | 3.6        | 4.5        | 4.2        | 3.2        | 3.9        | 3.9        | 4.2        | 3.8        | -          | -          |
|                                     |            |            |            |            |            |            |            |            |            |            |

#### HAMPTON ROADS SANITATION DISTRICT TREATMENT PLANT OPERATING SUMMARY LAST TEN FISCAL YEARS (Average Quantity per Day)

|                                 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| James River Plant<br>Flow (MGD) | 12.7 | 13.6 | 14.3 | 12.9 | 12.2 | 14.9 | 12.3 | 12.7 | 15.1 | 12.5 |
| Influent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 25.7 | 27.5 | 25.5 | 25.3 | 26.2 | 24.7 | 23.0 | 25.4 | 30.8 | 28.7 |
| TSS                             | 18.0 | 19.4 | 19.2 | 19.0 | 19.8 | 19.9 | 17.6 | 19.6 | 21.1 | 19.0 |
| TP                              | 0.5  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6  | 0.7  | 0.7  | 0.7  |
| TKN                             | 4.0  | 4.2  | 4.4  | 4.4  | 4.4  | 4.3  | 4.2  | 4.2  | -    | -    |
| Effluent (1,000 lbs.)           | 0.0  | 0.5  | 0.7  | 0.7  | 0.0  | 4.0  | 0.0  |      | 4.0  | 0.7  |
| BOD                             | 0.3  | 0.5  | 0.7  | 0.7  | 0.9  | 1.2  | 0.8  | 1.1  | 1.2  | 0.7  |
| TSS                             | 0.4  | 0.6  | 0.8  | 0.8  | 0.9  | 1.8  | 1.4  | 1.5  | 1.4  | 0.9  |
| TP                              | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.2  | 0.2  |
| TKN                             | 0.4  | 0.2  | 0.6  | 0.5  | 2.3  | 2.6  | 1.2  | 1.0  | -    | -    |
| Nansemond Plant                 |      |      |      |      |      |      |      |      |      |      |
| Flow (MGD)                      | 16.6 | 16.9 | 17.1 | 16.2 | 15.9 | 18.0 | 17.1 | 17.2 | 18.7 | 17.9 |
| Influent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 28.5 | 29.0 | 27.0 | 23.7 | 27.9 | 30.2 | 31.6 | 32.3 | 36.7 | 38.0 |
| TSS                             | 21.9 | 23.1 | 22.9 | 22.6 | 22.6 | 24.5 | 23.1 | 24.5 | 27.1 | 25.5 |
| TP                              | 1.1  | 1.1  | 1.1  | 1.0  | 1.0  | 1.1  | 1.1  | 1.3  | 1.7  | 1.3  |
| TKN                             | 5.6  | 5.8  | 5.9  | 6.0  | 6.1  | 6.0  | 6.2  | 6.4  | -    | -    |
| Effluent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 0.8  | 0.9  | 0.6  | 0.6  | 8.0  | 1.2  | 0.7  | 0.6  | 8.0  | 0.7  |
| TSS                             | 0.9  | 1.1  | 0.8  | 0.9  | 1.1  | 1.3  | 1.0  | 1.4  | 1.5  | 1.2  |
| TP                              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1  | 0.2  | 0.2  | 0.2  | 0.2  |
| TKN                             | 0.6  | 0.5  | 0.3  | 0.3  | 0.5  | 2.3  | 1.3  | 0.3  | -    | -    |
| Virginia Initiative Plant       |      |      |      |      |      |      |      |      |      |      |
| Flow (MGD)                      | 30.5 | 30.7 | 31.9 | 29.8 | 28.5 | 35.7 | 29.9 | 25.4 | 31.2 | 29.2 |
| Influent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 47.5 | 45.8 | 45.8 | 42.3 | 42.8 | 43.0 | 46.9 | 47.2 | 50.3 | 48.5 |
| TSS                             | 30.2 | 30.6 | 31.6 | 32.3 | 31.8 | 31.7 | 31.1 | 27.3 | 31.6 | 32.0 |
| TP                              | 1.1  | 1.2  | 1.1  | 1.1  | 1.1  | 1.2  | 1.3  | 1.4  | 1.5  | 1.3  |
| TKN                             | 7.1  | 7.4  | 7.5  | 7.6  | 7.3  | 7.2  | 7.5  | 7.1  | -    | -    |
| Effluent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 1.9  | 1.4  | 0.9  | 8.0  | 0.7  | 1.7  | 1.3  | 1.2  | 1.8  | 1.2  |
| TSS                             | 1.6  | 1.7  | 1.4  | 1.5  | 1.1  | 1.7  | 1.5  | 1.2  | 1.7  | 1.1  |
| TP                              | 0.2  | 0.2  | 0.1  | 0.2  | 0.1  | 0.1  | 0.1  | 0.2  | 0.1  | 0.1  |
| TKN                             | 8.0  | 0.6  | 0.5  | 0.5  | 0.4  | 8.0  | 1.5  | 1.1  | -    | -    |
| Williamsburg Plant              |      |      |      |      |      |      |      |      |      |      |
| Flow (MGD)                      | 8.4  | 9.2  | 8.9  | 9.1  | 8.6  | 10.0 | 12.0 | 14.4 | 15.1 | 14.5 |
| Influent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 34.7 | 40.4 | 37.7 | 33.5 | 37.5 | 37.9 | 59.9 | 79.0 | 80.8 | 80.1 |
| TSS                             | 16.2 | 19.9 | 16.8 | 16.7 | 19.0 | 19.6 | 23.4 | 30.6 | 28.8 | 28.3 |
| TP                              | 0.5  | 0.6  | 0.5  | 0.5  | 0.6  | 0.6  | 8.0  | 1.0  | 1.0  | 0.9  |
| TKN                             | 3.2  | 3.3  | 3.3  | 3.4  | 3.5  | 3.5  | 4.3  | 5.2  | -    | -    |
| Effluent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 0.3  | 0.3  | 0.3  | 0.3  | 0.3  | 0.4  | 0.3  | 0.4  | 0.4  | 0.3  |
| TSS                             | 0.3  | 0.3  | 0.4  | 0.6  | 0.3  | 0.4  | 0.3  | 0.5  | 0.5  | 0.6  |
| TP                              | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.2  |
| TKN                             | 0.1  | 0.2  | 0.3  | 0.2  | 0.2  | 0.2  | 0.3  | 0.2  | -    | -    |
| York River Plant                |      |      |      |      |      |      |      |      |      |      |
| Flow (MGD)                      | 12.6 | 13.2 | 13.3 | 11.2 | 10.8 | 12.5 | 10.7 | 10.2 | 12.3 | 11.4 |
| Influent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 18.2 | 17.9 | 17.2 | 13.3 | 15.5 | 16.3 | 15.5 | 15.8 | 17.8 | 20.1 |
| TSS                             | 16.9 | 16.4 | 15.7 | 14.1 | 14.3 | 14.0 | 12.6 | 12.4 | 16.5 | 17.9 |
| TP                              | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.4  | 0.5  | 0.5  | 0.5  |
| TKN                             | 3.5  | 3.6  | 3.5  | 3.2  | 3.6  | 3.3  | 3.3  | 3.7  | -    | -    |
| Effluent (1,000 lbs.)           |      |      |      |      |      |      |      |      |      |      |
| BOD                             | 0.4  | 0.4  | 0.5  | 0.2  | 0.5  | 0.4  | 0.4  | 0.3  | 0.4  | 0.7  |
| TSS                             | 0.2  | 0.1  | 0.2  | 0.1  | 0.3  | 0.5  | 0.5  | 0.4  | 0.5  | 0.7  |
| TP                              | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  |
| TKN                             | 0.3  | 0.3  | 0.4  | 0.1  | 0.1  | 0.2  | 0.3  | 0.1  | -    | -    |

#### HAMPTON ROADS SANITATION DISTRICT TEN LARGEST CUSTOMERS CURRENT YEAR AND NINE YEARS AGO

(in thousands)

|   | (in thousands)                   | 201       | 15      | 200       | 06      |
|---|----------------------------------|-----------|---------|-----------|---------|
| Customer  | Type                             | Amount    | Percent | Amount    | Percent |
| U.S. Navy - Norfolk Naval Base  | Military Facility                | \$ 4,614  | 2.1%    | \$ 1,857  | 1.7%    |
| Smithfield Foods  | Meat Processor                   | 3,281     | 1.5%    | 2,036     | 1.9%    |
| Anheuser - Busch, Inc.  | Brewery                          | 3,240     | 1.5%    | 5,512     | 5.2%    |
| Norfolk Naval Shipyard  | Military Ship Repair             | 1,843     | 0.8%    | -         | -       |
| City of Norfolk   | Municipality                     | 1,792     | 0.8%    | 1,072     | 1.0%    |
| Norfolk Redevelopment & Housing Authority   | Housing Authority                | 1,614     | 0.7%    | 589       | 0.6%    |
| Joint Expeditionary Base Little Creek - Fort Story (formerly U.S. Navy - Little Creek Amphibious Base)              | Military Facility                | 1,606     | 0.7%    | 715       | 0.7%    |
| Huntington Ingalls Industries<br>(formerly Northrop Grumman Newport News/<br>Newport News Shipbuilding and Drydock) | Shipbuilding                     | 1,288     | 0.6%    | 477       | 0.4%    |
| City of Virginia Beach  | Municipality                     | 1,164     | 0.5%    | -         | -       |
| Sentara Healthcare  | Health Care Network              | 1,076     | 0.5%    | -         | -       |
| U.S. Air Force - Langley  | Military Facility                | -         | -       | 560       | 0.5%    |
| PEPSI-Cola Bottling   | Bottling Facility                | -         | -       | 349       | 0.3%    |
| Marva Maid Dairy  | Manufacturer -<br>Dairy Products | -         | -       | 346       | 0.3%    |
| Total   |                                  | \$ 21,518 | 9.7%    | \$ 13,513 | 12.6%   |

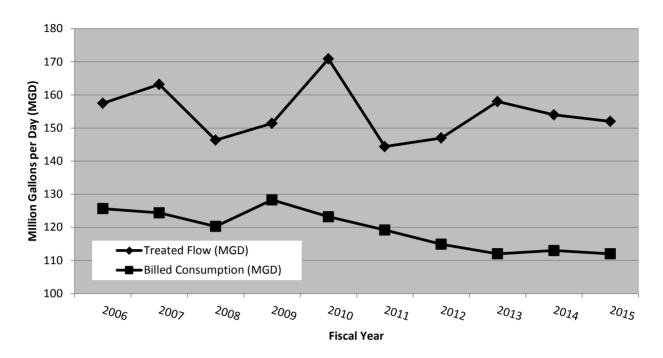
#### HAMPTON ROADS SANITATION DISTRICT TEN LARGEST EMPLOYERS CURRENT YEAR AND NINE YEARS AGO

|   |                         |                        | 2015 |                                      |                        | 2006 |                                      |
|---|-------------------------|------------------------|------|--------------------------------------|------------------------|------|--------------------------------------|
| <u>Employer</u>                                       | <u>Type</u>             | Number of<br>Employees | Rank | Percent of<br>Regional<br>Employment | Number of<br>Employees | Rank | Percent of<br>Regional<br>Employment |
| Naval Station Norfolk                                 | Military Facility       | 64,384                 | 1    | 7.1%                                 | 65,000                 | 1    | 7.4%                                 |
| Huntington Ingalls Industries                         | Shipbuilding and repair | 24,000                 | 2    | 2.6%                                 | 20,500                 | 2    | 2.3%                                 |
| Joint Base Langley-Eustis                             | Military Facility       | 21,332                 | 3    | 2.4%                                 | 19,198                 | 3    | 2.2%                                 |
| Sentara Healthcare                                    | Health care network     | 20,000                 | 4    | 2.2%                                 | 15,000                 | 5    | 1.7%                                 |
| Naval Air Station Oceana                              | Military Facility       | 16,408                 | 5    | 1.8%                                 | 16,961                 | 4    | 1.9%                                 |
| Joint Expeditionary Base Little<br>Creek - Fort Story | Military Facility       | 15,666                 | 4    | 1.7%                                 | 9,241                  | 7    | 1.0%                                 |
| Norfolk Naval Shipyard                                | Shipbuilding and repair | 10,488                 | 7    | 1.2%                                 | 7,600                  | 8    | 0.9%                                 |
| Virginia Beach Public Schools                         | Public schools          | 10,000                 | 8    | 1.1%                                 | 10,515                 | 6    | 1.2%                                 |
| Riverside Health System                               | Health care network     | 7,050                  | 9    | 0.8%                                 | 6,428                  | 9    | 0.7%                                 |
| Norfolk City Public Schools                           | Public schools          | 6,527                  | 10   | 0.7%                                 | 5,599                  | 10   | 0.6%                                 |
| Total   |                         | 131,471                |      | 14.5%                                | 111,042                |      | 12.6%                                |

Sources:

Hampton Roads Economic Development Alliance Hampton Roads Statistical Digest Confirmation with employers

### HAMPTON ROADS SANITATION DISTRICT COMPARISON OF TREATED FLOW TO BILLED FLOW LAST TEN FISCAL YEARS



|            |              | Billed      |
|------------|--------------|-------------|
| Year ended | Treated Flow | Consumption |
| June 30,   | (MGD)        | (MGD)       |
|            |              |             |
| 2006       | 158          | 126         |
| 2007       | 163          | 124         |
| 2008       | 146          | 120         |
| 2009       | 151          | 128         |
| 2010       | 171          | 123         |
| 2011       | 144          | 119         |
| 2012       | 147          | 115         |
| 2013       | 158          | 112         |
| 2014       | 154          | 113         |
| 2015       | 152          | 112         |
|            |              |             |

## HAMPTON ROADS SANITATION DISTRICT NUMBER OF EMPLOYEES BY IDENTIFIABLE ACTIVITY LAST TEN FISCAL YEARS

|                                | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|
| General Management             |      |      |      |      |      |      |      |      |      |      |
| General Manager                | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    |
| Human Resources                | 10   | 10   | 10   | 10   | 11   | 11   | 10   | 7    | 7    | 6    |
|                                | 14   | 14   | 14   | 15   | 16   | 16   | 15   | 12   | 12   | 11   |
| Finance & Administration       |      |      |      |      |      |      |      |      |      |      |
| Accounting & Finance           | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   |
| Customer Information Service   | 69   | 69   | 68   | 69   | 69   | 69   | 63   | 61   | 58   | 59   |
| Procurement                    | 9    | 9    | 9    | 7    | 7    | 8    | 8    | 8    | 7    | 7    |
| Support Staff                  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 2    | 3    | 3    |
| Total Finance & Administration | 91   | 91   | 90   | 89   | 89   | 90   | 84   | 81   | 78   | 79   |
| 1.6                            |      |      |      |      |      |      |      |      |      |      |
| Information Services           | 00   | 0.5  | 0.5  | 00   | 00   | 00   | 04   | 04   | 04   | 40   |
| Information Technology         | 39   | 35   | 35   | 33   | 33   | 33   | 21   | 21   | 21   | 16   |
| Support Staff                  | 1    | 1    | 1    | 2    | 2    | 2    | 3    | 3    | 3    | 2    |
| Total Information Services     | 40   | 36   | 36   | 35   | 35   | 35   | 24   | 24   | 24   | 18   |
| <u>Operations</u>              |      |      |      |      |      |      |      |      |      |      |
| Army Base Treatment Plant      | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 33   |
| Atlantic Base Treatment Plant  | 33   | 33   | 33   | 32   | 32   | 32   | 33   | 33   | 33   | 33   |
| Boat Harbor Treatment Plant    | 33   | 33   | 33   | 33   | 33   | 34   | 34   | 34   | 34   | 34   |
| ChesEliz. Treatment Plant      | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   | 32   |
| Interceptor System Maintenance | 120  | 120  | 120  | 121  | 122  | 122  | 106  | 93   | 89   | 89   |
| James River Treatment Plant    | 21   | 21   | 21   | 21   | 21   | 21   | 21   | 21   | 21   | 21   |
| Maintenance Shops              | 86   | 86   | 86   | 86   | 86   | 86   | 81   | 78   | 78   | 76   |
| Nansemond Treatment Plant      | 31   | 31   | 31   | 30   | 30   | 30   | 30   | 30   | 30   | 30   |
| Virginia Initiative Plant      | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   |
| Williamsburg Treatment Plant   | 29   | 29   | 29   | 31   | 31   | 31   | 31   | 34   | 34   | 34   |
| York River Treatment Plant     | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   |
| Middle Peninsula Division      | 17   | 17   | 17   | 17   | 17   | 15   | 15   | 15   | 13   | 12   |
| Support Staff                  | 25   | 25   | 25   | 24   | 24   | 24   | 24   | 30   | 30   | 37   |
| Total - Operations             | 513  | 513  | 513  | 513  | 514  | 513  | 493  | 486  | 480  | 485  |
| <u>Engineering</u>             |      |      |      |      |      |      |      |      |      |      |
| Design and Construction        | 21   | 19   | 19   | 17   | 15   | 15   | 15   | 14   | 14   | 14   |
| Support Staff                  | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 13   | 13   | 3    |
| Total - Engineering            | 35   | 33   | 33   | 31   | 29   | 29   | 29   | 27   | 27   | 17   |
| Water Quality                  |      |      |      |      |      |      |      |      |      |      |
| Industrial Waste (P3)          | 25   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| Technical Services             | 25   | 23   | 21   | 21   | 21   | 20   | 20   | 20   | 20   | 20   |
| Laboratory                     | 40   | 38   | 38   | 38   | 38   | 38   | 38   | 38   | 38   | 37   |
| Support Staff                  | 6    | 6    | 6    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Total - Water Quality          | 96   | 91   | 89   | 86   | 86   | 85   | 85   | 85   | 85   | 84   |
| Total Employees                | 789  | 778  | 775  | 769  | 769  | 768  | 730  | 715  | 706  | 694  |

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# Other Supplemental Section



**King and Queen County,** formed in 1691 from New Kent, was named for King William, III and Queen Mary. The Walkerton Bridge spans the Mattaponi River and the adjacent pier provides a spot for enjoying the natural beauty of the area.

**King William County** St. John's Church, dating from 1734, has been beautifully restored through an effort of over 80 years by the St. John's Church Restoration Association.

**Mathews County** Historic New Point Comfort Lighthouse, the lonely sentinel at the southern tip of Mathews County, traces its history from the earliest days of the United States. First lighted in 1805, it has survived war, hurricanes, abandonment and the eroding grasp of the

sea. It stands as a reminder of the nation's first efforts to establish commerce during the presidency of Thomas Jefferson.

**Middlesex County** is home to Deltaville, the "Boating Capitol of the Chesapeake;" the Town of Urbanna and the official State Oyster Festival; and the restored Buyboat the F.D. Crocket, now on the register of historic places and viewable at the Deltaville Maritime Museum. Middlesex is also the home of the most decorated member of the Marine Corps, General Chesty Puller, and his resting place. He is celebrated everyday through the Middlesex Museum in Saluda and is also honored yearly by a Marine Corps run through Saluda to his resting place at Christ Church.

## HAMPTON ROADS SANITATION DISTRICT SUMMARY OF PRIMARY BONDED DEBT SERVICE JUNE 30, 2015

(in thousands)

| (in thousand | 15) |           |              |              | Cubardinata  |              |
|--------------|-----|-----------|--------------|--------------|--------------|--------------|
| As of        |     |           | Caniar Banda |              | Subordinate  | Total Dobt   |
| As of        | _   | Principal | Senior Bonds | Dobt Comice  | Bonds        | Total Debt   |
| June 30,     |     | Principal | Interest     | Debt Service | Debt Service | Service      |
| 2016         | \$  | 18,558    | 28,132       | 46,690       | 11,196       | 57,886       |
| 2017         |     | 15,279    | 27,556       | 42,835       | 9,065        | 51,900       |
| 2018         |     | 18,144    | 26,985       | 45,129       | 6,524        | 51,653       |
| 2019         |     | 18,598    | 26,143       | 44,741       | 6,524        | 51,265       |
| 2020         |     | 19,353    | 25,328       | 44,681       | 6,524        | 51,205       |
| 2021         |     | 20,147    | 24,467       | 44,614       | 6,037        | 50,651       |
| 2022         |     | 20,991    | 23,557       | 44,548       | 5,659        | 50,207       |
| 2023         |     | 21,951    | 22,519       | 44,470       | 5,440        | 49,910       |
| 2024         |     | 22,876    | 21,511       | 44,387       | 5,231        | 49,618       |
| 2025         |     | 23,862    | 20,441       | 44,303       | 5,231        | 49,534       |
| 2020         |     | 20,002    | 20,          | ,000         | 0,201        | .0,001       |
| 2026         |     | 24,884    | 19,313       | 44,197       | 5,231        | 49,428       |
| 2027         |     | 25,856    | 18,247       | 44,103       | 5,152        | 49,255       |
| 2028         |     | 26,970    | 17,031       | 44,001       | 2,045        | 46,046       |
| 2029         |     | 28,145    | 15,750       | 43,895       | 1,994        | 45,889       |
| 2030         |     | 29,322    | 14,458       | 43,780       | 1,995        | 45,775       |
|              |     |           |              |              |              |              |
| 2031         |     | 30,420    | 13,362       | 43,782       | 1,996        | 45,778       |
| 2032         |     | 28,774    | 11,982       | 40,756       | 10           | 40,766       |
| 2033         |     | 28,020    | 10,615       | 38,635       | 10           | 38,645       |
| 2034         |     | 27,260    | 9,268        | 36,528       | 10           | 36,538       |
| 2035         |     | 28,295    | 7,844        | 36,139       | 10           | 36,149       |
|              |     |           |              |              |              |              |
| 2036         |     | 26,595    | 6,436        | 33,031       | 10           | 33,041       |
| 2037         |     | 27,840    | 5,038        | 32,878       | 10           | 32,888       |
| 2038         |     | 29,155    | 3,575        | 32,730       | 10           | 32,740       |
| 2039         |     | 14,595    | 2,044        | 16,639       | 10           | 16,649       |
| 2040         |     | 12,730    | 1,238        | 13,968       | 10           | 13,978       |
|              |     |           |              |              |              |              |
| 2041         |     | 4,800     | 815          | 5,615        | 10           | 5,625        |
| 2042         |     | 4,995     | 623          | 5,618        | 25,004       | 30,622       |
| 2043         |     | 5,190     | 424          | 5,614        | -            | 5,614        |
| 2044         |     | 5,400     | 216          | 5,616        | -            | 5,616        |
|              |     |           |              |              |              |              |
| Totals       | \$  | 609,005   | \$ 404,918   | \$ 1,013,923 | \$ 110,948   | \$ 1,124,871 |

### HAMPTON ROADS SANITATION DISTRICT BUDGETARY COMPARISON SCHEDULE FOR THE FISCAL YEAR ENDED JUNE 30, 2015

|   |                          |         |                           |                             | Variance<br>with final  |                         |
|---|--------------------------|---------|---------------------------|-----------------------------|-------------------------|-------------------------|
|   | Budget                   | ed Am   | ounts                     | Actual                      | Budget                  | Percent                 |
| (in thousands)  | Original Original        | 0071111 | Final                     | mounts                      | (over) under            | Variance                |
| ,   |                          |         |                           |                             |                         | _                       |
| OPERATING BUDGET EXPENSES   |                          |         |                           |                             |                         |                         |
| General Management  | \$ 2,358                 | \$      | 5,181                     | \$<br>4,358                 | \$ 823                  | 15.9%                   |
| Finance & Administration  | 11,799                   |         | 11,749                    | 10,505                      | 1,244                   | 10.6%                   |
| Information Services  | 10,166                   |         | 10,199                    | 9,000                       | 1,199                   | 11.8%                   |
| Operations  | 80,329                   |         | 79,774                    | 72,990                      | 6,784                   | 8.5%                    |
| Engineering   | 4,491                    |         | 4,491                     | 4,103                       | 388                     | 8.6%                    |
| Water Quality   | 11,521                   |         | 11,571                    | 10,919                      | 652                     | 5.6%                    |
| General   | 5,546                    |         | 6,046                     | 7,293                       | (1,247)                 | -20.6%                  |
| Debt Service  | 60,387                   |         | 60,387                    | 57,437                      | 2,950                   | 4.9%                    |
| TOTAL   | 186,597                  |         | 189,398                   | 176,605                     | 12,793                  | 6.8%                    |
| IMPROVEMENT BUDGET EXPENSES Major Repairs and Replacements Improvements   | 2,569<br>8,529<br>11,098 |         | 11,880<br>6,152<br>18,032 | <br>7,227<br>1,882<br>9,109 | 4,653<br>4,270<br>8,923 | 39.2%<br>69.4%<br>49.5% |
| TOTAL   | \$ 197,695               | \$      | 207,430                   | 185,714                     | \$ <u>21,716</u>        | 10.5%                   |
| Add: Prior Year Major Repairs and Replacement Prior Year Improvements carried over to control Unbudgeted Depreciation Unbudgeted Bad Debt Expense Capital Improvement Program items expense | urrent year              | to curr | ent year                  | 41,871<br>2,196<br>24,224   |                         |                         |
| Less: Capitalized items Major Repairs and Repla<br>Capitalized items Improvements<br>Debt Service   | acements                 |         |                           | 1,882<br>57,437             |                         |                         |
| TOTAL OPERATING EXPENSES  |                          |         |                           | \$<br>194,686               | =                       |                         |

#### HAMPTON ROADS SANITATION DISTRICT NOTES TO BUDGETARY COMPARISON SCHEDULE JUNE 30, 2015

#### **BUDGETARY HIGHLIGHTS**

HRSD's Commission adopts an Annual Budget consisting of an Operating Budget and an Improvement Budget. The Operating Budget as adopted for FY-15 was \$186,596,661 and contains all day-to-day operating expenses including personnel costs, fringe benefits, material and supplies, electricity, chemicals, insurance, contractual services and other miscellaneous expenses. There were several modifications to the Operating Budget during the year to reflect changes in spending patterns. The Improvement Budget as adopted for FY-15 was \$11,097,833 and contains all major purchases of new equipment, replacement vehicles and major repairs and replacements. The Improvement Budget was modified several times during the year. Transfers totaling \$6,934,427 for software upgrades, treatment plant automation, and equipment replacements resulted in a final budget of \$18,032,260. All adjustments to the Annual Budget were approved from surplus fund balances or from transfers within or among departments.

#### NOTE 1 - BUDGETARY ACCOUNTING AND CONTROL

#### **Budget preparation**

HRSD prepares its Annual Budget under the provisions of its enabling legislation, used to establish rates, fees and other charges, and of Section 3.12 of the Master Trust Indenture, dated December 1, 1993, and the 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 and Improvement Budgets by March 1 for the General Manager's review.

The HRSD Commission appoints a Finance Committee consist of two Commissioners. The two Commissioners meet in early April to review the Budgets, which are presented by staff at the April Commission meeting. HRSD's Commission reviews these budgets at that meeting.

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

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

The 2008 Trust Agreement requires Primary Debt Coverage of 1.20, and 1.00 for any subordinate debt. The HRSD Commission has a policy of providing senior revenue and total revenue bonded debt service coverage ratios of not less than 1.5 and 1.4 times annual debt service, respectively.

#### **Budget Accounting**

The Annual Budget is prepared on a basis of accounting consistent with accounting principles generally accepted in the United States of America. No provision is provided, however, for non-cash items such as depreciation and bad debt expense. The FY-15 Annual Budget consists of three parts: an operating budget that covers day-to-day operations; an improvement budget that is project oriented for major repairs and includes all replacement of equipment above \$5,000; and a capital budget that identifies all major capital project requirements over the next ten years. All operating budget amounts lapse at year-end. Specific improvement budget items may be carried over to subsequent years with the approval of the General Manager. The Commission annually adopts only the first year of the capital budget. HRSD's Commission separately approves all contracts that are awarded under the capital budget.

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### HAMPTON ROADS SANITATION DISTRICT SCHEDULE OF REVENUES, EXPENDITURES AND DEBT SERVICE FOR OPERATIONS - ACTUAL TO BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2015

| (In thousands) OPERATING REVENUE                           |    | Actual  | <br>Amended<br>Budget | Fa | ariance<br>avorable/<br>favorable) | Budget<br>Variance<br>Percentage |
|--|----|---------|-----------------------|----|------------------------------------|----------------------------------|
| Wastewater treatment charges                               | \$ | 221,626 | \$<br>214,050         | \$ | 7,576                              | 4%                               |
| Miscellaneous  |    | 3,935   | 2,150                 |    | 1,785                              | 83%                              |
| TOTAL REVENUES   |    | 225,561 | 216,200               |    | 9,361                              | 4%                               |
|  |    |         |                       |    |                                    |                                  |
| CURRENT EXPENDITURES                                       |    |         |                       |    |                                    |                                  |
| General Management   |    | 4,358   | 5,181                 |    | 823                                | 16%                              |
| Finance & Administration                                   |    | 10,505  | 11,749                |    | 1,244                              | 11%                              |
| Information Services                                       |    | 9,000   | 10,199                |    | 1,199                              | 12%                              |
| Operations   |    | 72,990  | 79,774                |    | 6,784                              | 9%                               |
| Engineering  |    | 4,103   | 4,491                 |    | 388                                | 9%                               |
| Water Quality  |    | 10,919  | 11,571                |    | 652                                | 6%                               |
| Major Repairs & Replacements                               |    | 9,109   | 18,032                |    | 8,923                              | 0%                               |
| General  |    | 7,293   | 6,046                 |    | (1,247)                            | (21%)                            |
| TOTAL CURRENT EXPENDITURES                                 |    | 128,277 | 147,043               |    | 18,766                             | 13%                              |
|  |    |         | <br>                  |    |                                    |                                  |
| EXCESS OF OPERATING REVENUES                               |    |         |                       |    |                                    |                                  |
| OVER EXPENDITURES  |    | 97,284  | 69,157                |    | 28,127                             | 41%                              |
| NONOPERATING REVENUE (EXPENSE) Wastewater facility charges |    | 6,640   | 5,500                 |    | 1,140                              | 21%                              |
| Investment income  |    | 1,674   | 1,200                 |    | 474                                | 40%                              |
| Bond interest subsidy                                      |    | 2,364   | 2,400                 |    | (36)                               | (2%)                             |
| Other income   |    | -       | <br>1,310             |    | (1,310)                            | (100%)                           |
| TOTAL NONOPERATING REVENUE                                 |    | 10,678  | <br>10,410            |    | 268                                | 3%                               |
| INCOME BEFORE CAPITAL CONTRIBUTIONS                        |    | 107,962 | 79,567                |    | 28,395                             | 36%                              |
| CAPITAL CONTRIBUTIONS                                      |    |         |                       |    |                                    |                                  |
| State capital grants                                       |    | 16,519  | _                     |    | 16,519                             | 100%                             |
| Other capital contributions                                |    | 3,000   |                       |    | 3,000                              | 100%                             |
| Other capital contributions                                | _  | 3,000   | <br>                  |    | 3,000                              | 10070                            |
| AMOUNT AVAILABLE FOR DEBT                                  |    | 127,481 | 79,567                |    | 47,914                             | 60%                              |
| DEDT EVDENDITI IDES  |    |         |                       |    |                                    |                                  |
| DEBT EXPENDITURES  |    | E7 407  | 60 207                |    | 2.050                              | E0/                              |
| Principal & Interest                                       |    | 57,437  | 60,387                |    | 2,950                              | 5%                               |
| TOTAL DEBT EXPENDITURES                                    |    | 57,437  | 60,387                |    | 2,950                              | 5%                               |
| AMOUNT AVAILABLE TO REINVEST                               | \$ | 70,044  | \$<br>19,180          | \$ | 50,864                             | 265%                             |

# HAMPTON ROADS SANITATION DISTRICT OBJECTIVE CLASSIFICATION OF DEPARTMENTAL EXPENDITURES FOR OPERATIONS - ACTUAL TO BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2015

|                        | General    |       | Finance &      |        | Information |       |    |            |
|------------------------|------------|-------|----------------|--------|-------------|-------|----|------------|
| (in thousands)         | Management |       | Administration |        | Services    |       | _  | Operations |
| Personal Services      | \$         | 1,761 | \$             | 5,318  | \$          | 2,847 | \$ | 33,157     |
| Fringe Benefits        |            | 535   |                | 1,920  |             | 854   |    | 11,912     |
| Materials and Supplies |            | 57    |                | 63     |             | 1,163 |    | 2,014      |
| Transportation         |            | 49    |                | 80     |             | 28    |    | 928        |
| Utilities              |            | 0     |                | 187    |             | 1,213 |    | 9,103      |
| Chemicals              |            | 0     |                | 0      |             | 0     |    | 7,119      |
| Contractual Services   |            | 171   |                | 2,842  |             | 2,821 |    | 8,199      |
| Miscellaneous          |            | 1,785 |                | 95     |             | 74    |    | 558        |
| General                |            | 0     |                | 0      |             | 0     |    | 0          |
|                        | \$         | 4,358 | \$             | 10,505 | \$          | 9,000 | \$ | 72,990     |

**Debt Expenditures** 

Total Departmental and Debt Expenditures

# HAMPTON ROADS SANITATION DISTRICT OBJECTIVE CLASSIFICATION OF DEPARTMENTAL EXPENDITURES FOR OPERATIONS - ACTUAL TO BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2015

|    |           |    |         |    |         |    |         | Percent |               |    | Variance     |
|----|-----------|----|---------|----|---------|----|---------|---------|---------------|----|--------------|
|    |           |    | Water   |    |         |    |         | of      | FY-2015       |    | Favorable/   |
| En | gineering | _  | Quality | _  | General | _  | Totals  | Total   | Budget        | (  | Unfavorable) |
| \$ | 2,828     | \$ | 6,446   | \$ | 0       | \$ | 52,357  | 29      | \$<br>52,427  | \$ | 70           |
|    | 880       |    | 2,148   |    | 0       |    | 18,249  | 10      | 22,384        |    | 4,135        |
|    | 22        |    | 1,024   |    | 0       |    | 4,343   | 2       | 5,263         |    | 920          |
|    | 45        |    | 167     |    | 0       |    | 1,297   | 1       | 1,392         |    | 95           |
|    | 0         |    | 0       |    | 0       |    | 10,503  | 6       | 11,956        |    | 1,453        |
|    | 0         |    | 0       |    | 0       |    | 7,119   | 4       | 8,885         |    | 1,766        |
|    | 257       |    | 837     |    | 0       |    | 15,127  | 9       | 16,625        |    | 1,498        |
|    | 71        |    | 297     |    | 0       |    | 2,880   | 2       | 4,033         |    | 1,153        |
|    | 0         |    | 0       |    | 7,293   |    | 7,293   | 4       | 6,046         |    | (1,247)      |
| \$ | 4,103     | \$ | 10,919  | \$ | 7,293   | _  | 119,168 | 67      | 129,011       |    | 9,843        |
|    |           |    |         |    |         |    | 57,437  | 33      | 60,387        |    | 2,950        |
|    |           |    |         |    |         | \$ | 176,605 | 100     | \$<br>189,398 | \$ | 12,793       |

# HAMPTON ROADS SANITATION DISTRICT DEPARTMENTAL SUMMARY OF EXPENDITURES ACTUAL TO BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2015

| (In thousands)                         |    | Actual          | Aı | mended<br>Budget | F  | /ariance<br>avorable/<br>nfavorable) |
|--|----|-----------------|----|------------------|----|--------------------------------------|
| GENERAL MANAGEMENT                     | •  | 4.704           | •  | 4 745            | •  | (40)                                 |
| Personal Services                      | \$ | 1,761           | \$ | 1,745            | \$ | (16)                                 |
| Fringe Benefits                        |    | 535             |    | 655              |    | 120                                  |
| Materials and Supplies                 |    | 57              |    | 72               |    | 15                                   |
| Transportation Utilities               |    | 49              |    | 53               |    | 4                                    |
| Chemicals                              |    | 474             |    | 400              |    | 04                                   |
| Contractual Services                   |    | 171             |    | 192              |    | 21                                   |
| Miscellaneous                          |    | 1,785           |    | 2,464            |    | 679                                  |
|  |    | 4,358           |    | 5,181            |    | 823                                  |
| FINANCE & ADMINISTRATION               |    |                 |    |                  |    |                                      |
| Personal Services                      |    | 5,318           |    | 5,429            |    | 111                                  |
| Fringe Benefits                        |    | 1,920           |    | 2,401            |    | 481                                  |
| Materials and Supplies                 |    | 63              |    | 118              |    | 55                                   |
| Transportation                         |    | 80              |    | 104              |    | 24                                   |
| Utilities<br>Chemicals                 |    | 187             |    | 145              |    | (42)                                 |
| Contractual Services                   |    | 2,842           |    | 3,320            |    | 478                                  |
| Miscellaneous                          |    | 95              |    | 232              |    | 137                                  |
|  | -  | 10,505          |    | 11,749           |    | 1,244                                |
|  |    |                 |    |                  |    | ,                                    |
| INFORMATION SERVICES                   |    |                 |    |                  |    |                                      |
| Personal Services                      |    | 2,847           |    | 3,346            |    | 499                                  |
| Fringe Benefits                        |    | 854             |    | 1,268            |    | 414                                  |
| Materials and Supplies                 |    | 1,163           |    | 636              |    | (527)                                |
| Transportation                         |    | 28              |    | 54               |    | 26                                   |
| Utilities                              |    | 1,213           |    | 1,525            |    | 312                                  |
| Chemicals                              |    | 1,210           |    | 1,020            |    | 012                                  |
| Contractual Services                   |    | 2,821           |    | 3,246            |    | 425                                  |
| Miscellaneous                          |    | 74              |    | 124              |    | 50                                   |
| Miscellaricods                         |    | 9,000           |    | 10,199           |    | 1,199                                |
|  |    | 3,000           |    | 10,133           |    | 1,133                                |
| OPERATIONS                             |    |                 |    |                  |    |                                      |
| Personal Services                      |    | 33,157          |    | 32,366           |    | (791)                                |
|  |    |                 |    |                  |    |                                      |
| Fringe Benefits Materials and Supplies |    | 11,912<br>2,014 |    | 14,239           |    | 2,327                                |
| ·                                      |    |                 |    | 3,412            |    | 1,398                                |
| Transportation                         |    | 928             |    | 961              |    | 33                                   |
| Utilities<br>Chamicala                 |    | 9,103           |    | 10,286           |    | 1,183                                |
| Chemicals                              |    | 7,119           |    | 8,885            |    | 1,766                                |
| Contractual Services                   |    | 8,199           |    | 8,897            |    | 698                                  |
| Miscellaneous                          |    | 558             |    | 728              |    | 170                                  |
|  |    | 72,990          |    | 79,774           |    | 6,784                                |

# HAMPTON ROADS SANITATION DISTRICT DEPARTMENTAL SUMMARY OF EXPENDITURES ACTUAL TO BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2015

|                                 |            | Amended       | Variance<br>Favorable/ |
|---------------------------------|------------|---------------|------------------------|
| (In thousands)                  | Actual     | Budget        | (Unfavorable)          |
| ENGINEERING                     |            |               |                        |
| Personal Services               | 2,828      | 2,982         | 154                    |
| Fringe Benefits                 | 880        | 1,136         | 256                    |
| Materials and Supplies          | 22<br>45   | 25<br>54      | 3                      |
| Transportation<br>Utilities     | 45         | 54            | 9                      |
| Chemicals                       |            |               |                        |
| Contractual Services            | 257        | 223           | (34)                   |
| Miscellaneous                   | 71         | 71            | (34)                   |
| Misocharicous                   | 4,103      | 4,491         | 388                    |
|                                 | 1,100      |               |                        |
| WATER QUALITY                   |            |               |                        |
| Personal Services               | 6,446      | 6,559         | 113                    |
| Fringe Benefits                 | 2,148      | 2,685         | 537                    |
| Materials and Supplies          | 1,024      | 1,000         | (24)                   |
| Transportation                  | 167        | 166           | (1)                    |
| Chemicals                       |            |               |                        |
| Contractual Services            |            |               | (0.0)                  |
| Contractual Services            | 837        | 747           | (90)                   |
| Miscellaneous                   | 297        | 414<br>11,571 | <u>117</u><br>652      |
|                                 | 10,919     | 11,571        | 002                    |
| GENERAL                         |            |               |                        |
| Personal Services               | 891        | (600)         | (1,491)                |
| Fringe Benefits                 | 501        | 564           | 73                     |
| Materials and Supplies          | 29         | 60            | 31                     |
| Utilities                       | 510        | 535           | 25                     |
| Contractual Services            | 1,487      | 1,362         | (125)                  |
| Apprentice Program              | 250        | 181           | (69)                   |
| Insurance                       | 2,526      | 2,713         | 187                    |
| District Memberships            | 437        | 386           | (50)                   |
| Miscellaneous                   | 662        | 845           | 183                    |
|                                 | 7,293      | 6,046         | (1,236)                |
| TOTAL DEPARTMENTAL EXPENDITURES | \$ 119,168 | \$ 129,011    | \$ 3,070               |

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**HRSD's service area** has grown since its creation in 1940 to include 17 cities and counties in southeast Virginia. We thank our local partners for their permission to use the photos in this document, which highlights a few of the many attractions that make our coastal region special.



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#### APPENDIX B

#### **CERTAIN DEFINITIONS**

The following is a brief summary of certain definitions of certain terms contained in the Trust Agreement and the Third Supplemental Trust Agreement and used in this Official Statement. This summary does not purport to be complete or definitive and qualified in its entirety by reference to the Trust Agreement and the Third Supplemental Trust Agreement, copies of which are available for examination at the offices of the Trustee.

"Additional Bonds" means Bonds, if any, issued by the District, subsequent to the issuance of the Subordinate 2011 Bonds, pursuant to the Trust Agreement, including Additional Bonds issued in exchange for other such Additional Bonds or in replacement for mutilated, destroyed, stolen or lost Additional Bonds.

"Audited Financial Statements" means the annual financial statements of the District as audited and reported on by a firm of independent public accountants, for a twelve-month period constituting a Fiscal Year or other period indicated, prepared in accordance with generally accepted accounting principles.

"Balloon Long-Term Indebtedness" means Long-Term Indebtedness 25% or more of the principal payments of which is due in a single year, which portion of the principal is not required by the documents pursuant to which such Indebtedness is issued to be amortized by redemption prior to such date.

"Bond Registrar" means the Bond Registrar at the time serving as such under the Trust Agreement whether the original or a successor bond registrar.

"Bonds" means, the Subordinate 2011 Bonds, the Subordinate 2012 Bonds, the Series 2016A Bonds, the Series 2016B Bonds, if issued, and any Additional Bonds under the Trust Agreement, including such Bonds issued in exchange for other such Bonds and Bonds issued in replacement for and upon the cancellation of mutilated Bonds or in lieu of and in substitution for destroyed, stolen or lost Bonds.

"Capital Appreciation Bonds" means Bonds the interest on which is compounded at the rates and on the dates set forth in the Series Agreement authorizing the issuance of such Bonds and is payable upon redemption or on the maturity date of such Bonds. Nothing in the Trust Agreement prohibits the District from designating in such Series Agreement any such Bonds by a name other than Capital Appreciation Bonds.

"Coincidental Maximum Annual Debt Service" means the highest amount of debt service due and payable on the Senior Obligations and Parity Obligations in the then-current or any succeeding Fiscal Year. For purposes of this definition, debt service due and payable on the Senior Obligations for any Fiscal Year is to be determined by reference to the Principal and Interest Requirements (as defined in the Senior Trust Agreement) and debt service due and payable on Parity Obligations for any Fiscal Year is to be determined by reference to the Principal and Interest Requirements (as defined in the Trust Agreement).

"Commission" means the Hampton Roads Sanitation District Commission, which is the governing body of the District.

"Contracted Services" means services rendered or facilities provided to the District for the performance for or on behalf of the District of functions similar to those performed by the District from a specific project, projects or systems, pursuant to a contract, whether a financing lease, a service agreement or another arrangement.

"Credit Facility" means a line of credit, letter of credit, standby bond purchase agreement or similar credit enhancement or liquidity facility, including self-liquidity provided by the District, established to provide credit or liquidity support for Indebtedness.

"Cross-over Date" means, with respect to Cross-over Refunding Indebtedness, the date on which the principal portion of the related Cross-over Refunded Indebtedness is to be paid or redeemed from the proceeds of such Cross-over Refunding Indebtedness.

"Cross-over Refunded Indebtedness" means Indebtedness refunded by Cross-over Refunding Indebtedness.

"Cross-over Refunding Indebtedness" means Indebtedness issued for the purpose of refunding other Indebtedness if the proceeds of such refunding Indebtedness are irrevocably deposited in escrow to secure the payment on the applicable redemption date or maturity date of the refunded Indebtedness, and the earnings on such escrow deposit (i) are required to be applied to pay interest on such Refunding Indebtedness until the Cross-over Date and (ii) are not to be used directly or indirectly to pay interest on the Refunded Indebtedness.

"Current Interest Bonds" means Bonds the interest on which is payable on the Interest Payment Dates provided therefor in the Series Agreement authorizing the issuance of such Bonds.

"Debt Service Component of Contracted Services" means that part of the payment for Contracted Services for which the District is obligated to pay that the chief financial officer of the District shall have determined in writing in an Officer's Certificate at the time the District commits to receive such Contracted Services to be for the purpose of paying a fixed charge or the principal of and interest on obligations, directly or indirectly associated with rendering the Contracted Services, of the person providing the Contracted Services.

"**Debt Service Reserve Fund**" means the Hampton Roads Sanitation District (Virginia) Subordinate Wastewater Revenue Bonds 2011 Trust Agreement Debt Service Reserve Fund created and so designated by the Trust Agreement.

"**Debt Service Reserve Fund Requirement**" means (i) on the date of issuance of the Series 2016A Bonds, zero (0) and (ii) if, and to the extent, the District in its sole discretion determines to fund the Debt Service Reserve Fund, the Debt Service Reserve Fund Requirement specified in a Series Agreement.

"Defaulted Interest" means any interest on any Bond which is payable, but is not punctually paid or duly provided for, on any Interest Payment Date.

"Defeasance Obligations" means, except as otherwise provided in a Series Agreement, noncallable (i) Government Obligations, (ii) Obligations issued or guaranteed by any of the following: (1) Federal Home Loan Bank System, (2) Export-Import Bank of the United States, (3) Federal Financing Bank, (4) Government National Mortgage Association, (5) Federal Home Loan Mortgage Company, (6) Federal Housing Administration, (7) Private Export Funding Corp., (8) Federal National Mortgage Association, (9) Federal Farm Credit Bank, (10) Resolution Funding Corporation, and (11) Rural

Economic Community Development Administration (formerly, Farmers Home Administration), (iii) evidences of ownership of a proportionate interest in specified Government Obligations, which Government Obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian, (iv) obligations issued pursuant to Section 21B(d)(3) of the Federal Home Loan Bank Act, as amended by Section 511(a) of the Financial Institutions Reform, Recovery and Enforcement Act of 1989, and commonly known as "interest strips" of the Resolution Funding Corporation, (v) Defeased Municipal Obligations, and (vi) evidences of ownership of a proportionate interest in specified Defeased Municipal Obligations, which Defeased Municipal Obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity as custodian.

"**Defeased Municipal Obligations**" means, except as otherwise provided in a Series Agreement, obligations of state or local government municipal bond issuers which are rated at the time of acquisition the highest rating by at least two of the three Rating Agencies, meeting the following conditions:

- (i) (A) such obligations are not to be redeemed prior to maturity or the Trustee has been given irrevocable instructions concerning their call for redemption, and (B) the issuer of such obligations has covenanted not to redeem such obligations other than as set forth in such instructions;
- (ii) such obligations are secured by Government Obligations that may be applied only to interest, principal, and premium payments on such obligations;
- (iii) the principal of and interest on such Government Obligations (plus any cash in the escrow fund with respect to such pre-refunded obligations) are sufficient to meet the liabilities of the obligations;
- (iv) the Government Obligations serving as security for the obligations are held by an escrow agent or trustee; and
- (v) such Government Obligations are not available to satisfy any other claims, including those against the trustee or escrow agent.

"Derivative Agreement" means, without limitation, (i) any contract known as or referred to or which performs the function of an interest rate swap agreement, forward payment conversion agreement or futures contract; (ii) any contract providing for payments based on levels of, or changes or differences in, interest rates or other indices; (iii) any contract to exchange cash flows or payments or series of payments; (iv) any type of contract called, or designed to perform the function of, interest rate floors or caps, options, puts or calls, to hedge or minimize any type of financial risk, including, without limitation, payment, rate or other financial risk; and (v) any other type of contract or arrangement that the District determines is to be used, or is intended to be used, to manage or reduce the cost of Indebtedness, to convert any element of Indebtedness from one form to another or to protect against any type of financial risk or uncertainty.

"Derivative Agreement Counterparty" means, with respect to a Derivative Agreement, the person that is identified in such agreement as the counterparty to, or contracting party with, the District.

"Derivative Indebtedness" means all or any portion of Indebtedness of the District, which bears interest at

- (a) a variable rate for any period of time meeting the following requirements: (i) the District has issued or entered into a Derivative Agreement in respect of all or such portion of such Indebtedness, and (ii) such Derivative Agreement provides that, during the period that such Indebtedness bears interest at a variable rate, the District will pay a fixed rate and the provider of the Derivative Agreement will pay a variable rate, then in such case such Indebtedness, taken together with the Derivative Agreement, is to be deemed to result in a net fixed rate payable by the District for such period of time (the "Hedged Fixed Rate"), for so long as the District and the party with whom the District has entered into the Derivative Agreement makes all payments required to be made by the terms of the Derivative Agreement, or
- (b) a fixed rate for any period of time meeting the following requirements: (i) the District has issued or entered into a Derivative Agreement in respect of all or such portion of such Indebtedness, and (ii) such Derivative Agreement provides that during the period that such Indebtedness bears interest at a fixed rate the District will pay a variable rate and the provider of the Derivative Agreement will pay a fixed rate, then such Indebtedness, taken together with the Derivative Agreement, is to be deemed to result in a net variable rate payable by the District for such period of time (the "Hedged Variable Rate"), assuming the District and the party with whom the District has entered into the Derivative Agreement make all payments required to be made by the terms of the Derivative Agreement.
- "**Designated Office**" of the Trustee means the designated office of the Trustee, which office at the date of acceptance by the Trustee of the duties and obligations imposed on the Trustee by the Third Supplemental Trust Agreement is located at 500 Ross Street, 12<sup>th</sup> Floor, Pittsburgh, Pennsylvania 15262.
- "District" means the Hampton Roads Sanitation District, a political subdivision of the Commonwealth of Virginia.
- "District Representative" means each of the persons at the time designated to act on behalf of the District in a written certificate furnished to the Trustee, which certificate is to contain the specimen signature(s) of such person(s) and is to signed on behalf of the Commission by its Chairman or Vice Chairman or the General Manager of the District.
- "Financial Statements" means the unaudited financial statements of the District for the Fiscal Year or other period indicated, pro forma or otherwise, and containing the same financial information as the Audited Financial Statements.
- "Fiscal Year" means the twelve-month period beginning on July 1 of one calendar year and ending on June 30 of the following calendar year or such other twelve-month period designated by the Commission.
- "Government Obligations" means direct obligations of, or obligations the payment of principal of and interest on which are fully and unconditionally guaranteed by, the United States of America.
- "Hedged Fixed Rate" means Hedged Fixed Rate as defined in the definition of Derivative Indebtedness.
- "**Hedged Variable Rate**" means Hedged Variable Rate as defined in the definition of Derivative Indebtedness.
  - "Holder" means an owner of any Obligation issued in other than bearer form.

"Indebtedness" means (i) all indebtedness of the District for borrowed money, (ii) all installment sales, conditional sales and capital lease obligations incurred or assumed by the District, and (iii) the Debt Service Component of Contracted Services.

"Independent Consultant" means a firm or firms which are not, and no member, stockholder, director, officer, trustee or employee of which is, an officer, director, trustee or employee of the District, and which is a professional management or engineering consultant of national repute for having the skill and experience necessary to render the particular report required by the provision of the Trust Agreement in which such requirement appears.

"Independent Insurance Consultant" means a firm or person selected by the District, who is not an officer, director, trustee or employee of the District, and which or who is qualified to survey risks and to recommend insurance coverage for wastewater treatment systems and organizations engaged in such operations and is selected by the District.

"Interest Payment Date" means each date described as such in a Series Agreement, and, for the Series 2016A Bonds, means each February 1 or August 1, as the case may be, beginning August 1, 2016.

"**Interest Requirements**" for any Fiscal Year means the amount that is required to pay interest on all Outstanding Parity Obligations.

"Investment Obligations" means any and all investment obligations authorized by (A) the Investment of Public Funds Act, being Section 2.2-4500 *et seq.*, Code of Virginia, 1950, as amended, (B) the Government Non-Arbitrage Investment Act, being Section 2.2-4700 *et seq.*, Code of Virginia, 1950, as amended, and (C) successor statutes to those described in (A) and (B) above, as the same may be from time to time amended.

"Issuance Costs" means all issuance costs incurred in connection with the Bonds. Examples of such issuance costs include, but are not limited to, the following, if any: (a) counsel fees; (b) financial advisor fees incurred in connection with the issuance of the Bonds; (c) Rating Agency fees; (d) depositary fees incurred in connection with the issuance of the Bonds; (e) trustee, paying agent and certifying and authenticating agent fees related to the issuance of the Bonds; (f) accountant fees related to the issuance of the Bonds; (g) printing costs; (h) costs incurred in connection with the required public approval process; and (i) costs of engineering and feasibility studies necessary to the issuance of the Bonds.

"**Junior Obligations**" means Indebtedness of the District the terms of which shall provide that it will be subordinate and junior in right of payment to the prior payment in full of the Senior Obligations and the Parity Obligations to the extent and in the manner set forth below:

In the event (a) of any insolvency or bankruptcy proceedings, and any receivership, liquidation, reorganization, arrangement or other similar proceedings in connection therewith, relative to the District or to its Property, or in the event of any proceedings for voluntary liquidation, dissolution or other winding-up of the District whether or not involving insolvency or bankruptcy, (b) any Junior Obligation is declared or otherwise becomes due and payable before its expressed maturity because of the occurrence of an event of default occurring under the documents pursuant to which such Junior Obligation is issued; and such declaration has not been rescinded and annulled, or (c) any "Event of Default" (as defined in the Senior Trust Agreement) under the Senior Trust Agreement shall occur and be continuing with respect to any Senior Obligation or any Event of Default under the Trust Agreement shall occur and be continuing with respect to any Parity Obligation and (1) written notice of such default shall have been given to the District and (2) judicial proceedings shall be commenced in respect of such Event of Default within 180 days in the case of a default in payment of principal or interest on Senior Obligations or Parity

Obligations and within 90 days in the case of any other default after the giving of such notice, then, *first*, the Holders of Senior Obligations shall be entitled to receive payment in full of all principal, premium and interest on all Senior Obligations before the Holders of the Parity Obligation are entitled to receive any payment on account of principal or interest upon the Parity Obligations and, *second*, the Holders of Parity Obligations shall be entitled to receive payment in full of all principal, premium and interest on all Parity Obligations before the Holders of the Junior Obligations are entitled to receive any payment on account of principal, premium or interest upon the Junior Obligations.

"Lien" means any mortgage, deed of trust or pledge of, security interest in or encumbrance on any Property of the District which secures any Indebtedness or any other obligation of the District.

"Long-Term Debt Service Coverage Ratio" means, for any period of time, the ratio determined by dividing the Net Revenues by Coincidental Maximum Annual Debt Service.

"Long-Term Debt Service Requirement" means, for any period of 12 consecutive calendar months for which such determination is made, the aggregate of the payments to be made in respect of principal and interest (whether or not separately stated) on Outstanding Long-Term Indebtedness during such period, also taking into account:

- with respect to Balloon Long-Term Indebtedness that is not amortized by the terms thereof (a) the amount of principal that would be payable in such period if such principal were amortized from the date of incurrence thereof over a period of the lesser of 30 years and the number of years until the final maturity of such Indebtedness on a level debt service basis, at an interest rate equal to the market rate for a fixed rate obligation set forth in an opinion, delivered to the District and the Trustee, of a banking institution, an investment banking institution or an independent registered municipal advisor, selected by the District and knowledgeable in municipal finance, as the interest rate at which the District could reasonably expect to borrow the same by incurring Indebtedness with the same term as the period assumed above; provided, however, that if the date of calculation is within 12 calendar months of the actual final maturity of such Indebtedness, the full amount of principal payable at maturity is to be included in such calculation or (b) principal payments or deposits with respect to Indebtedness secured by an irrevocable letter of credit issued by, or an irrevocable line of credit with, a bank or other financial institution, provided such credit arrangement is rated in one of the three highest rating categories by at least two of the Rating Agencies or rated in the highest short-term rating category by at least two of the Rating Agencies, nominally due in the last Fiscal Year in which such Indebtedness matures may, at the option of the District, be treated as if such principal payments or deposits were due as specified in any credit agreement issued in connection with such letter of credit, line of credit or insurance policy or pursuant to the repayment provisions of such letter of credit, line of credit or insurance policy, and interest on such Indebtedness after such Fiscal Year is to be assumed to be payable pursuant to the terms of such credit agreement or repayment provisions;
- (ii) with respect to Long-Term Indebtedness which is Variable Rate (but not Hedged Fixed Rate) Indebtedness, the interest on such Indebtedness is to be calculated at 120% of the rate which is equal to the average of the actual interest rates which were in effect (weighted according to the length of the period during which each such interest rate was in effect) for the most recent twelve-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a twelve-month period), except that with respect to new Variable Rate Indebtedness the interest rate for such Indebtedness for the initial interest rate period is 120% of the average of the SIFMA Swap Index for last 12 whole months for which such Index is available and thereafter will be calculated as set forth above:

- (iii) with respect to any Credit Facility, (a) to the extent that such Credit Facility has not been used or drawn upon, the principal and interest relating to such Credit Facility will not be included in the Long-Term Debt Service Requirement and (b) to the extent such Credit Facility has been drawn upon, the payment provisions of such Credit Facility with respect to repayment of principal and interest thereon will be included in the Long-Term Debt Service Requirement;
- (iv) with respect to Derivative Indebtedness, (i) for any historical computation, the interest on such Indebtedness is to be calculated by adding (A) the amount of interest payable by the District on such Derivative Indebtedness pursuant to its terms and (B) the amount of regularly scheduled payments made by the District pursuant to the Derivative Agreement and subtracting (C) the amount of regularly scheduled payments made by the Derivative Agreement Counterparty pursuant to the Derivative Agreement; (ii) for any historical pro forma or forecasted computation, if the Derivative Agreement Counterparty has a long-term credit rating of at least "A" (without regard to any rating refinement or gradation by numerical modifier or otherwise) assigned to it by at least one Rating Agency then rating the Indebtedness and does not have a long-term rating of less than "A" (without regard to any rating refinement or gradation by numerical modifier or otherwise) from any Rating Agency then rating the Indebtedness and has not defaulted on its payment obligations thereunder as of the date of computation, the interest on such Derivative Indebtedness is to be calculated at the Hedged Fixed Rate or the Hedged Variable Rate, as the case may be; and (iii) in all other instances, the amount of interest payable by the District on such Derivative Indebtedness is to be calculated as if such Derivative Agreement had not been executed: and
- (v) in the case of Indebtedness having the benefit of a Credit Facility that provides for a term loan facility that requires the payment of the principal in one year or more, the Indebtedness is to be considered Balloon Long-Term Indebtedness and is to be assumed to have the maturity schedule described in paragraph (i)(a) of this definition;

provided, however, that (i) interest is to be excluded from the determination of Long-Term Debt Service Requirement to the extent the same is provided from the proceeds of the Long-Term Indebtedness, (ii) the aggregate of the payments to be made with respect to principal and interest on Outstanding Long-Term Indebtedness will not include principal and interest payable from Qualified Escrow Funds, and (iii) principal is to be excluded from the determination of Long-Term Debt Service Requirement on Short-Term Indebtedness described in paragraph (c) under the caption "—Limitations on Indebtedness in Appendix C.

"Long-Term Indebtedness" means all obligations having a maturity of a term longer than one year for borrowed money incurred or assumed by the District, including (a) Short-Term Indebtedness if secured by a Credit Facility containing a commitment to provide financing to retire such Short-Term Indebtedness and such commitment provides for the repayment of principal on terms which would, if such commitment were implemented, constitute Long-Term Indebtedness, and (b) the current portion of Long-Term Indebtedness, for any of the following:

- (1) money borrowed for an original term, or renewable at the option of the borrower for a period from the date originally incurred, longer than one year;
- (2) leases which are required to be capitalized in accordance with generally accepted accounting principles having an original term, or renewable at the option of the lessee for a period from the date originally incurred, longer than one year;

- (3) installment sale or conditional sale contracts having an original term in excess of one year; and
- (4) the Debt Service Component of Contracted Services in connection with Contracted Services rendered or provided pursuant to a contract having an original term of more than one year.
- "Maximum Annual Debt Service" means, at any given time of determination, the greatest Long-Term Debt Service Requirement for the then current or any succeeding Fiscal Year.
- "Maximum Annual Debt Service on the Parity Obligations" means, at any given time of determination, the maximum coincidental Principal and Interest Requirements for the Parity Obligations for the then-current or any succeeding Fiscal Year.
- "Maximum Interest Rate" means, for all Series 2016A Bonds, the lesser of (i) 12% per annum and (ii) the maximum rate permitted by law.
- "Net Book Value" when used in connection with Property, Plant and Equipment or other Property, means the value of such property, net of accumulated depreciation, as recognized by the District in conformity with generally accepted accounting principles.
- "**Net Revenues**" means all revenues received by the District from its Wastewater System less Operating Expenses, provided that Net Revenues will not include any Transition charge.
- "Net Revenues Available for Debt Service" means all Net Revenues less debt service on Senior Obligations.
- "Officer's Certificate" means a certificate signed by a District Representative. Each Officer's Certificate presented pursuant to the Trust Agreement is to state that it is being delivered pursuant to (and is to identify the section or subsection of), and incorporate by reference and use in all appropriate instances all terms defined in, the Trust Agreement. Each Officer's Certificate is to state (i) that the terms thereof are in compliance with the requirements of the section or subsection pursuant to which such Officer's Certificate is delivered or to state in reasonable detail the nature of any non-compliance and the steps being taken to remedy such non-compliance and (ii) that it is being delivered together with any opinions, schedules, statements or other documents required in connection therewith.
- "Operating Expenses" means those current expenses paid by the District that may be required to pay the cost of maintaining, repairing and operating the Wastewater System, including, but not limited to, reasonable and necessary usual expenses of administration, operation, maintenance and repair, costs for billing and collecting the rates, fees and other charges for the use of or the services furnished by the Wastewater System, insurance premiums, credit enhancement and liquidity support fees, legal, engineering, auditing and financial advisory expenses, expenses and compensation of the Trustee, and deposits into a self-insurance program. Operating Expenses excludes allowance for depreciation and amortization and expenditures for extraordinary maintenance or repair or improvements. Operating Expenses also excludes expenses for improvements that will not be owned by the District but that will, in the reasonable determination of the Commission, as evidenced by a resolution thereof, maintain or improve the integrity of the Wastewater System.
- "Opinion of Bond Counsel" means an opinion in writing signed by an attorney or firm of attorneys acceptable to the Trustee and experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds.

- "**Opinion of Counsel**" means an opinion in writing signed by an attorney or firm of attorneys who may be counsel for the District or other counsel selected by the District.
- "**Outstanding**," when used with reference to Bonds or other Parity Obligations, means, as of a particular date, all Bonds and Parity Obligations theretofore issued under the Trust Agreement, except:
- (1) Bonds and Parity Obligations theretofore cancelled by the Bond Registrar or delivered to the Bond Registrar for cancellation;
- (2) Bonds and Parity Obligations for the payment of which money, Defeasance Obligations, or a combination of both, sufficient to pay, on the date when such Bonds are to be paid, the principal amount of, and the interest accruing to such date on, the Bonds to be paid, has been deposited with the Trustee or the Bond Registrar in trust for the Holders of such Bonds; Defeasance Obligations shall be deemed to be sufficient to pay Bonds on a specified date if the principal of and the interest on such Defeasance Obligations, when due, will be sufficient to pay on such date the principal of, and the interest accruing on, such Bonds to such date:
- (3) Bonds and Parity Obligations in exchange for or in lieu of which other Bonds or Parity Obligations have been issued; and
- (4) Bonds and Parity Obligations deemed to have been paid in accordance with the provisions for defeasance contained in such Bonds or Parity Obligations (See "Defeasance" in Appendix C);

provided, however, that Bonds and Parity Obligations owned or held by or for the account of the District or any affiliate or any subsidiary or controlled affiliate of the District shall not be deemed Outstanding Bonds or Outstanding Parity Obligations for the purpose of any consent or other action or any calculation of Outstanding Bonds or Outstanding Parity Obligations provided for in the articles of the Trust Agreement relating to default and remedies, Supplemental Agreements and release of the Trust Agreement, and neither the District nor any affiliate, subsidiary or controlled affiliate of the District as registered owners of such Bonds or Parity Obligations shall be entitled to consent or take any other action provided for in default and remedies, Supplemental Agreements and release of the Trust Agreement. Notwithstanding the foregoing, Bonds or Parity Obligations owned or held for the account of the District or an or any affiliate or any subsidiary or controlled affiliate of the District shall not be deemed to be paid unless the District delivers, or causes such Bonds or Parity Obligations to be delivered, to the Trustee with the express written instructions of a District Representative directing the Trustee to cancel such Bonds in accordance with the procedures set forth in the Trust Agreement.

"Parity Obligations" means Bonds and VRA Subordinate Obligations.

"**Principal and Interest Requirements**" for any Fiscal Year means the sum of the Principal Requirements and Interest Requirements for such Fiscal Year.

"Principal Payment Date" means each date described as such in a Series Agreement.

"**Principal Requirements**" for any Fiscal Year means the amount required to pay the principal of all Parity Obligations coming due in such Fiscal Year.

"**Property**" means any and all rights, titles and interests in and to any and all property whether real or personal, tangible or intangible and wherever situated.

"**Property, Plant and Equipment**" means all Property of the District which is property, plant and equipment under generally accepted accounting principles.

"Qualified Escrow Funds" means amounts deposited in a segregated escrow fund, or other similar fund or account, in connection with the issuance of Indebtedness which fund is required by the documents establishing such fund to be applied toward the District's payment obligations with respect to principal or interest on (a) the Indebtedness secured thereby which is issued under the documents establishing such fund or (b) Indebtedness secured thereby which was issued prior to the establishment of such fund.

"Qualified Reserve Fund Substitute" means (i) an irrevocable letter of credit, naming the Trustee as beneficiary, issued by any domestic or foreign bank, or any branch or agency thereof, whose long-term debt obligations are rated in one of the two highest rating categories by at least two of the Rating Agencies that will rate such obligations, or (ii) a policy of reserve fund insurance naming the Trustee as beneficiary, issued by an insurance company or financial institution whose claims paying ability is rated in one of the two highest rating categories by at least two of the Rating Agencies that rate such obligations, in either case (A) in an amount not less than the Debt Service Reserve Fund Requirement, (B) the terms of which allow the Trustee to make the draws required to fund the Debt Service Reserve Fund if and as required (See "Debt Service Reserve Fund; Qualified Reserve Fund Substitute" in Appendix C) and (C) that provides that the issuer of which has not been given a lien on any portion of the property of the District unless such lien also secures the Bonds on a parity basis.

"Rate Covenant" means the rate covenant of the District set out in the Trust Agreement and described under the caption "—Rate Covenant" in Appendix C hereto.

"Rating Agency" or "Rating Agencies" means one or more of Fitch, Moody's or Standard & Poor's for so long as it is a nationally recognized statistical rating organization and any new nationally recognized statistical rating organization.

"Senior Bonds" has the meaning given the term "Bonds" by the Senior Trust Agreement.

"Senior Debt Service Reserve Fund" means the Hampton Roads Sanitation District (Virginia) Wastewater Revenue Bonds Debt Service Reserve Fund created and so designated by the Senior Trust Agreement.

"Senior Indebtedness" means Indebtedness secured on a parity with the Senior Bonds under the terms of the Senior Trust Agreement.

"Senior Obligations" means, collectively, Senior Bonds and Senior Indebtedness, and, if the District is required to fund the Senior Debt Service Reserve Fund pursuant to the terms of the Senior Trust Agreement, the District's funding obligations thereunder.

"Senior Trust Agreement" means that certain trust agreement, dated as of March 1, 2008, as the same may be supplemented and amended from time to time, between the District and The Bank of New York Mellon Trust Company, N.A., as successor Trustee (in such capacity, the "Senior Trustee").

"Series Agreement" means a supplemental trust agreement entered into or the resolution adopted by the Commission providing for the issuance of Bonds or Parity Obligations pursuant to the Trust Agreement. A Series Agreement will include any Officer's Certificate delivered by a District Representative or Representatives to whom authority has been delegated by the terms of the Series Agreement to provide the details of such Bonds and, for purposes of additional VRA Subordinate

Obligations, a Series Agreement will include such resolutions adopted by the Commission or financing agreements authorized thereby specifying the details of such additional VRA Subordinate Obligations.

"**Short-Term Indebtedness**" means all obligations for borrowed money, other than the current portion of Long-Term Indebtedness, incurred or assumed by the District for any of the following:

- (1) money borrowed for an original term, or renewable at the option of the borrower for a period from the date originally incurred, of one year or less;
- (2) leases which are capitalized in accordance with generally accepted accounting principles having an original term, or renewable at the option of the lessee for a period from the date originally incurred, of one year or less; and
- (3) installment purchase or conditional sale contracts having an original term of one year or less.

"SIFMA Swap Index" means The Securities Industry and Financial Market Association Municipal Swap Index as of the most recent date for which such index was published or such other weekly, high-grade index comprised of seven-day, Tax-Exempt variable rate demand notes published by Bloomberg, or its successor, or otherwise designated by The Securities Industry and Financial Market Association; provided, however, that, if such index is no longer available or its successor, the "SIFMA Swap Index" will mean such other reasonably comparable index selected by the remarketing agent appointed by the District in connection with Variable Rate Indebtedness.

"Supplement" means an agreement, including a Series Agreement, supplemental to, and authorized and executed pursuant to the terms of, the Trust Agreement.

"**Tax-Exempt**" with reference to Bonds or other Parity Obligations means any Bonds or Parity Obligations so designated in the related Series Agreement.

"**Tax Certificate**" means a certificate or comparable instrument of the District that contains undertakings of the District with reference to Tax-exempt Parity Obligations.

"Total Operating Revenues" means, with respect to the District, as to any period of time, as total operating revenues as determined in accordance with generally accepted accounting principles.

"Transition Charge" means any rates, fees, charges or surcharges relating to the Wastewater System or the customers thereof established by irrevocable rate order or other action or instrument, and applicable to or by the District, in conjunction with the issuance of debt or other securities under a separate resolution, indenture or similar instrument (other than the Senior Trust Agreement, the Trust Agreement or other instrument securing Indebtedness secured by revenues of the Wastewater System) to the extent such rates, fees, charges or surcharges are pledged or otherwise encumbered or conveyed as security for such debt or other securities.

"**Trust Agreement**" means the trust agreement entered into by and between Hampton Roads Sanitation District and The Bank of New York Mellon Trust Company, N.A., as Trustee, dated as of October 1, 2011, as amended and restated as of March 1, 2016, including any Series Agreement and any other trust agreement amendatory thereto or supplemental thereto.

"Variable Rate Indebtedness" means any portion of Indebtedness the interest rate on which is not established at the time of incurrence at a fixed or constant rate until maturity.

"VRA Subordinate Obligations" means the District's VRA Subordinate Obligations or other evidences of indebtedness heretofore issued, and such additional Parity Obligations issued to VRA payable on a parity with Parity Obligations issued pursuant to the Trust Agreement.

"Wastewater System" means the wastewater treatment system of the District as it may exist at any time and includes all improvements and expansions thereof and additions thereto except as may otherwise be provided by resolution of the Commission.

## APPENDIX C

### SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT

The following is a brief summary of certain provisions of the Trust Agreement. This summary does not purport to be complete or definitive and qualified in its entirety by reference to the Trust Agreement, a copy of which is available for examination at the offices of the Trustee.

#### **Establishment of Funds**

The Trust Agreement provides for an Issuance Fund, a Construction Fund, a Bond Fund, and a Debt Service Reserve Fund. It requires that the money and securities in each Fund be held in trust by the Trustee and applied as provided in the Trust Agreement, and pending such application be subject to a lien and charge in favor of the Holders and for the further security of the Holders until paid or transferred pursuant to the Trust Agreement.

#### **Issuance Fund and Construction Fund**

The Trust Agreement also requires that money in the Issuance Fund be applied to the payment of Issuance Costs incurred in connection with the issuance of the Bonds, to be financed from Bonds proceeds. Money in the Construction Fund will be applied to Capital Improvement Program Costs. Unexpended fund balances in the Issuance Fund and the Construction Fund will be applied as provided in the applicable Series Agreement. The Series Agreement for the Series 2016A Bonds provides any such unexpended fund balances are to be applied as directed by the District.

The District may, in any Series Agreement, create Subfunds within the Issuance Fund and the Construction Fund.

#### **Bond Fund**

The District will make payments directly to the Trustee for deposit in the Bond Fund in amounts sufficient to pay in full, when due, all Bonds issued under the Trust Agreement, together with the interest thereon. In the event the balance in the Bond Fund is insufficient for such purposes, upon notification by the Trustee, the District is to deliver to the Trustee an amount sufficient to cure the same. If such amount is insufficient, the Trustee is required to transfer to the Bond Fund the amount necessary to remedy the deficiency from the Debt Service Reserve Fund. Each such payment shall be made only in the event and to the extent that, as of the date of such payment, the District shall have paid to the Senior Trustee for the account of the Senior Bond Fund all amounts attributable to the principal of and interest on any outstanding Senior Obligations due and owing thereon, plus any amounts required to be deposited to the credit of the Senior Debt Service Reserve Fund in accordance with the terms of the Senior Trust Agreement, as of such date.

## Debt Service Reserve Fund; Qualified Reserve Fund Substitute

No funds will be deposited to the credit of the Debt Service Reserve Fund upon the delivery of the Series 2016A Bonds. If the District elects to fund the Debt Service Reserve Fund, then an amount equal to the Debt Service Reserve Fund Requirement, as the same shall be specified in a Supplemental Agreement, shall be deposited to the Debt Service Reserve Fund Requirement.

The Trustee will use amounts in the Debt Service Reserve Fund to make transfers to the Bond Fund to the extent necessary to pay interest on and principal of the Bonds, whenever and to the extent that

the money on deposit in the Bond Fund is insufficient for such purposes and the District has failed to cure such deficiency.

The District may, at any time, deliver to the Trustee a Qualified Reserve Fund Substitute. In such event, if the District also delivers to the Trustee a written statement setting forth the use of the cash and Investment Obligations then on deposit to the credit of the Debt Service Reserve Fund, accompanied by an Opinion of Bond Counsel to the District, addressed to the Trustee, to the effect that such proposed use will not cause the interest on the Tax-Exempt Bonds to be includable in the gross income of the owners thereof for purposes of federal income taxation, the Trustee is to transfer to the District all amounts on deposit to the credit of the Debt Service Reserve Fund. If any Qualified Reserve Fund Substitute is in effect, the Trustee is to give such notices and execute such documents as required to assure that funds (i) are available in such amounts and at such times to assure timely payment of principal of and interest on the Bonds and (ii) are drawn to fund the Debt Service Reserve Fund in an amount equal to the Debt Service Reserve Fund Requirement at least six months prior to the expiration date of the Qualified Reserve Fund Substitute unless (a) the Trustee has received a substitute Qualified Reserve Fund Substitute to replace such expiring Qualified Reserve Fund Substitute or (b) the expiration date of the expiring Qualified Reserve Fund Substitute is no earlier than the final stated maturity date of the Bonds.

## **Payment of Principal and Interest**

The District will cause to be paid, when due, the principal of (whether at maturity, by acceleration or otherwise) and interest on the Bonds at the places, on the dates and in the manner provided in the Trust Agreement and in said Bonds; provided that it is understood that the Bonds are not general obligations of the District but are special obligations and are payable solely from Net Revenues Available for Debt Service derived by the District from its Wastewater System and the money attributable to proceeds of Bonds and the income from the investment thereof and not from any other fund or source. To secure the prompt payment of the principal of, redemption premium, if any, and the interest on the Senior Obligations and the performance by the District of its other obligations under the Trust Agreement, the District grants to the Trustee a security interest in its Net Revenues Available for Debt Service.

## **Investment of Money**

Money held for the credit of all funds and accounts created under the Trust Agreement is to be continuously invested and reinvested by the Trustee in Investment Obligations, to the extent practicable in accordance with the instructions of a District Representative, subject to the yield restrictions set forth in the Tax Certificate. The Trust Agreement requires that any Investment Obligations mature not later than the respective dates when the money held for the credit of such funds or accounts will be required for the purposes intended; provided, however, that Investment Obligations deposited in the Debt Service Reserve Fund mature no later than the final maturity date of the Bonds secured by the Debt Service Reserve Fund.

Unless a Qualified Reserve Fund Substitute is in effect, the District is to reimburse the Debt Service Reserve Fund for any loss resulting from a decline in the value of Investment Obligations in which money held for the credit of the Debt Service Reserve Fund is invested if on any date of valuation the amount on deposit in the Debt Service Reserve Fund is less than the Debt Service Reserve Fund Requirement.

Investment Obligations acquired with money and credited to any fund or account established under the Trust Agreement are required to be held by or under the control of the Trustee and will be deemed at all times to be part of such fund or account in which such money was originally held. Interest accruing on such Investment Obligation and any profit or loss realized upon the disposition or maturity of such investment will be credited to or charged against such fund or account. The Trustee is required to

sell at the best price attainable or reduce to cash a sufficient amount of such Investment Obligations whenever it is necessary to provide money to make any payment or transfer of money from any such fund or account. The Trustee will not be liable or responsible for any loss resulting from any such investment.

#### Valuation

For the purpose of determining the amount on deposit in any fund or account, Investment Obligations in which money in such fund or account is invested are to be valued (a) if such Investment Obligations mature, or are subject to redemption at the option of the holder thereof, within five years or less from the date of valuation thereof, such Investment Obligations are to be valued at amortized cost, and (b) if such Investment Obligations mature, or are subject to redemption at the option of the holder thereof, more than five years from the date of valuation thereof, such Investment Obligations are to be valued at the market value or the amortized cost thereof, whichever is lower.

The Trustee will value the Investment Obligations in the funds and accounts five Business Days prior to each Interest Payment Date. In addition, subject to prior notice, the Investment Obligations will be valued by the Trustee at any time requested by the District Representative, but not more than once in any calendar month other than as provided in the Trust Agreement.

#### **Limitations on Indebtedness**

The District may issue Additional Bonds or incur other Parity Obligations, provided that, after giving effect to all other Indebtedness incurred by the District, such Additional Bonds or other Parity Obligations are incurred only in the manner and pursuant to the terms set forth below provided, however, that VRA Senior Obligations may become VRA Subordinate Obligations without limitation:

- (a) Long-Term Indebtedness may be incurred if, prior to incurrence of the Long-Term Indebtedness, there is delivered to the Trustee:
  - (i) an Officer's Certificate of a District Representative certifying that the Long Term Debt Service Coverage Ratio for the most recent period of twelve (12) full consecutive calendar months preceding the date of delivery of the certificate of the District Representative for which there are Financial Statements available, adjusted for revenues and expenses resulting from anticipated new customers and any planned program of rate increases that has been approved by the Commission, taking all Long Term Indebtedness incurred after such period and the proposed Long Term Indebtedness into account as if such Long Term Indebtedness had been incurred at the beginning of such period, is not less than 120%;
  - (ii) an Officer's Certificate of a District Representative certifying that the District is expected to comply with the Rate Covenant set forth in the Trust Agreement for the five Fiscal Years following the date of issuance of the proposed Long-Term Indebtedness. Such certificate is to be accompanied by a statement of the relevant assumptions upon which such pro forma Financial Statements for the District are based, including but not limited to, adjustments to revenues and expenses resulting from anticipated new customers and any planned program of rate increases that has been approved by the Commission;
  - (iii) if the Long-Term Indebtedness is authorized for any purpose other than the refunding of the outstanding Senior Obligations or Outstanding Parity Obligations, an Officer's Certificate of a District Representative to the effect, and to the extent applicable, that in his or her opinion (a) the improvements or property to which the proceeds from the issuance of the Long-Term Indebtedness are to be applied will be a part of the Wastewater System, (b) the

proceeds of the Long-Term Indebtedness and other specified sources will be sufficient to pay the estimated cost of such improvements or property, (c) the period of time that will be required to complete such improvements or acquire such property, and (d)(1) the proceeds of the Long-Term Indebtedness are necessary to complete the project to be financed thereby, (2) the failure to make such improvements or acquire or construct such property will result in an interruption or reduction of Net Revenues, or (3) during the first two Fiscal Years following the completion of the improvements or the acquisition of the property, the projected Net Revenues will satisfy the Rate Covenant described below. In providing this certificate, the District Representative may take into consideration future Wastewater System rate increases, provided that such rate increases have been duly approved by the Commission and any other person and entity required to give approval for the rate increase to become effective. In addition, he or she may take into consideration additional future revenues of the Wastewater System to be derived under then existing contractual agreements entered into by the District and from reasonable estimates of growth in the customer base of the District; or

- (iv) an Officer's Certificate of a District Representative certifying compliance with the Rate Covenant set forth in the Trust Agreement for the most recent period of 12 full consecutive calendar months for which there are Financial Statements available preceding the date of delivery of the certificate.
- (b) Long-Term Indebtedness may be incurred for the purpose of refunding Outstanding Long-Term Indebtedness if, either (i) a certificate of an independent financial advisor to the effect that, the Long-Term Indebtedness issued to refund outstanding Senior Obligations or Outstanding Parity Obligations will have, in the aggregate, a lower Long-Term Debt Service Requirement than the Long-Term Debt Service Requirement on the Senior Obligations or Outstanding Parity Obligations to be refunded with the proceeds thereof, or (ii) an Officer's Certificate of a District Representative to the effect that during the first two complete Fiscal Years following the issuance of the refunding Long-Term Indebtedness, the projected Net Revenues will satisfy the Rate Covenant described under the heading "—Rate Covenant" below. In providing the certificate described in clause (b), the Officer's Certificate may take into account the factors described in the last two sentences of subsection (a)(iii) of this Section. In addition, the Trustee shall receive an Opinion of Counsel stating that upon the incurrence of such proposed Long-Term Indebtedness and application of the proceeds thereof (on the Cross-over Date, in the case of Cross-over Refunding Indebtedness), the Outstanding Long-Term Indebtedness to be refunded thereby will no longer be Outstanding.
- (c) Short-Term Indebtedness may be incurred as a Parity Obligation subject to the same tests that apply to the incurrence of Parity Obligations generally; provided, however, that notwithstanding such limitation, the District may incur as a Parity Obligation from time to time and have outstanding at any one time Short-Term Indebtedness in an amount up to 10% of its Total Operating Revenues as reflected in the Financial Statements of the District for the most recent period of twelve consecutive months for which Financial Statements are available, and provided, further, that the District may incur Short-Term Indebtedness secured by a Credit Facility without limitation. Short-Term Indebtedness may be incurred as Junior Obligations without compliance with the tests that apply to the incurrence of Parity Obligations.
- (d) Additional VRA Subordinate Obligations may be incurred by the District subject to the delivery of an Officer's Certificate of a District Representative demonstrating compliance with the incurrence test for the issuance of Long-Term Indebtedness described above in paragraphs (a) or (b) above and the Rate Covenant described below, *provided*, *however*, anything in the Trust Agreement notwithstanding, the District may make such additional covenants in a supplemental resolution, financing agreement or other agreement authorizing and securing a VRA Subordinate Obligations as may be required by VRA as a condition of selling such VRA Subordinate Obligations.

- (e) Junior Obligations may be incurred without limitation.
- (f) For purposes of demonstrating compliance with the incurrence test for the issuance of Long-Term Indebtedness described above in paragraph (a), the District may (but is not required to) elect in the applicable Series Agreement to treat all or any Parity Obligations authorized in a Credit Facility (including, for example and without limitation, a self-liquidity arrangement provided by the District, a line of credit or a liquidity facility supporting a commercial paper program), but not immediately issued or incurred under such Credit Facility, as subject to such incurrence test as of a single date, notwithstanding that none, or less than all, of the authorized principal amount of such Parity Obligations have been issued or incurred as of such date.
- (g) Notwithstanding the foregoing provisions regarding limitations on Indebtedness described above, nothing contained in the Trust Agreement will preclude the District from incurring any obligation under a Credit Facility.

#### **Rate Covenant**

- (a) The District has covenanted and agreed in the Trust Agreement that it will fix and collect rates, fees and other charges for the use of and for services furnished or to be furnished by the Wastewater System, and will from time to time revise such rates, fees and other charges so that in each Fiscal Year the Net Revenues will equal at least 120% of the sum of (a) the Principal and Interest Requirements (as defined in the Senior Trust Agreement on Senior Obligations and (b) the Principal and Interest Requirements. If, for any reason, the Net Revenues are insufficient to satisfy the foregoing covenant, the District shall within one hundred twenty (120) days adjust and increase its rates, fees and other charges (to the extent permitted by the Enabling Act), or reduce its operating and maintenance expenses so as to provide sufficient Net Revenues to satisfy such requirement.
- (b) If at any time the District fails to comply with its Rate Covenant described in paragraph (a) above, the District is to immediately notify the Trustee, such notice also containing an Officer's Certificate of a District Representative as to (i) the amount of the deficiency in Net Revenues which existed for the applicable period and the rates, fees and other charges which must be established by the District to cure such deficiency, and (ii) during the Fiscal Year in which the certificate is delivered, the projected Net Revenues will satisfy the Rate Covenant made by the District and described in paragraph (a) above, or, if not, the rates, fees and other charges the District must establish to satisfy such rate covenant. In addition, the District agrees, to the extent permitted by law, to take appropriate action to increase its rates, fees and other charges or reduce its operating and maintenance expenses to cure any deficiency.
- (c) On or before the last day of each Fiscal Year, the District will review the adequacy of its rates, fees and other charges for the next Fiscal Year, and, if such review indicates the District's rates, fees and other charges are insufficient to satisfy the Rate Covenant described in paragraph (a) above, the District is to promptly take appropriate action to increase its rates, fees and other charges or reduce its operating and maintenance expenses to cure any deficiency.

## **Limitation on Creation of Liens**

The District agrees that it will not create or permit the existence of any Lien on its Property or upon its Net Revenues other than Permitted Liens.

"Permitted Liens" consist of the following:

- (a) Liens arising by reason of good faith deposits with the District in connection with leases of real estate, bids or contracts (other than contracts for the payment of money), deposits by the District to secure public or statutory obligations, or to secure, or in lieu of, surety, stay or appeal bonds, and deposits as security for the payment of taxes or assessments or other similar charges;
- (b) Any Lien arising by reason of deposits with, or the giving of any form of security to, any governmental agency or any body created or approved by law or governmental regulation as a condition to the transaction of any business or the exercise of any privilege or license, or to enable the District to maintain self-insurance or to participate in any funds established to cover any insurance risks or in connection with any workers' compensation, unemployment insurance, pension or profit sharing plans or other social security, or to share in the privileges or benefits required for companies participating in such arrangements;
- (c) Any judgment lien against the District so long as such judgment is being contested in good faith and execution thereon is stayed;
- (d) (i) Rights reserved to or vested in any municipality or public authority by the terms of any right, power, franchise, grant, license, permit or provision of law, affecting any Property; (ii) any liens on any Property for taxes, assessments, levies, fees, water and sewer rents, and other governmental and similar charges and any liens of mechanics, materialmen, laborers, suppliers or vendors for work or services performed or materials furnished in connection with such Property, which are not due and payable or which are not delinquent or which, or the amount or validity of which, are being contested and execution thereon is stayed or, with respect to liens of mechanics, materialmen, laborers, suppliers or vendors, have been due for less than 90 days; (iii) easements, rights-of-way, servitudes, restrictions, oil, gas or other mineral reservations and other minor defects, encumbrances, and irregularities in the title to any Property which do not materially impair the use of such Property or materially and adversely affect the value thereof; (iv) to the extent that it affects title to any Property, the Trust Agreement; and (v) landlord's liens;
- (e) Any Lien that was existing on the date of authentication and delivery of the Series 2011 Bonds issued under the Trust Agreement; provided that no such Lien may be increased, extended, renewed or modified to apply to any Property of the District not subject to such Lien on such date or to secure Indebtedness not Outstanding on the date of issuance of the Series 2011 Bonds, unless such Lien as so extended, renewed or modified otherwise qualifies as a Permitted Lien under the Trust Agreement;
- (f) Any lien on pledges, gifts or grants to be received in the future, including any income derived from the investment thereof;
  - (g) The Lien of the Senior Trust Agreement;
  - (h) Any Lien securing Parity Obligations on a parity basis;
- (i) Any Liens on Property received by the District through gifts, grants or bequests, such liens being due to restrictions on such gifts, grants or bequests of Property or the income thereon;
- (j) Any Lien on moveable equipment securing Indebtedness incurred to purchase such moveable equipment, provided that the total of such Indebtedness does not exceed 15% of

the Net Book Value of the Property, Plant and Equipment of the District as shown on the Financial Statements for the prior Fiscal Year; and

(k) Any Lien on Net Revenues securing Junior Indebtedness; provided that such lien is expressly subordinate and junior to the Lien on Net Revenues Available for Debt Service granted to the Trustee for the payment of principal of, redemption premium, if any, and the interest on the Parity Obligations and to secure the prompt payment of the and the performance by the District of its other obligations under the Trust Agreement.

## **Designation of Funds**

No later than the last Business Day of each month, the District will specifically earmark cash, cash equivalents or marketable securities or any combination thereof in an amount equal to the interest on and the principal of Bonds that will accrue in the next month, taking into account any scheduled maturities of interest or principal scheduled to become due and payable in such month and the funds theretofore earmarked for such purpose. The District may assume that both interest and principal accrue daily from the prior payment date or date of issuance but not more than 12 months prior to a payment date.

# **Maintenance of Properties**

The District covenants in the Trust Agreement:

- (a) to cause its Property to be maintained, preserved and kept in good repair, working order and condition and all needed and proper repairs, renewals and replacements thereof to be made; provided, however, that nothing described in this paragraph (a) will be construed to (i) prevent it from ceasing to operate any portion of its Property, if in its judgment (supported, in the case of such a cessation other than in the ordinary course of business by an opinion or certificate of an Independent Consultant) it is advisable not to operate the same, or if it intends to sell or otherwise dispose of the same and within a reasonable time endeavors to effect such sale or other disposition, or (ii) obligate it to retain, preserve, repair, renew or replace any Property, leases, rights, privileges or licenses no longer used or, in the judgment of the Commission, useful in the conduct of its business;
- (b) To do all things reasonably necessary to conduct its affairs and carry on its business and operations in such manner as to comply with any and all applicable laws of the United States and the Commonwealth of Virginia and duly observe and conform to all valid orders, regulations or requirements of any governmental authority relative to the conduct of its business and the ownership of its Properties; provided, nevertheless, that nothing contained in the Trust Agreement requires it to comply with, observe and conform to any such law, order, regulation or requirement of any governmental authority so long as the validity thereof or the applicability thereof to it is contested in good faith;
- (c) To pay promptly all lawful taxes, governmental charges and assessments at any time levied or assessed upon or against it or its Property; provided, however, that it will have the right to contest in good faith any such taxes, charges or assessments or the collection of any such sums and pending such contest may delay or defer payment thereof;
- (d) To pay promptly or otherwise satisfy and discharge all of its Indebtedness and all demands and claims against it as and when the same become due and payable, other than any

thereof (exclusive of the Indebtedness created and Outstanding under the Trust Agreement) whose validity, amount or collectability is being contested in good faith;

- (e) At all times to comply with all terms, covenants and provisions of any Liens at such time existing upon its Property or any part thereof or securing any of its Indebtedness; and
- (f) To procure and maintain all necessary licenses and permits for the operation of its Wastewater System;

provided, however, that it need not comply with the covenants described in this section if and to the extent that the Commission determines in good faith, evidenced by a resolution of the Commission, that such compliance is not in its best interests and that lack of such compliance would not materially impair its ability to pay its Indebtedness when due.

## Insurance

- (a) The District agrees that it will maintain, or cause to be maintained, the following types of insurance, subject to the provisions described in subsection (b) below, in such amounts as, in its judgment, are adequate to protect it and its Property and operations from material financial loss: (i) comprehensive general liability insurance, and (ii) property coverage on an "all risk" basis.
- (b) If the District is self-insured (excluding deductibles) for any coverage described in (a) above, the District is to provide the Trustee a report of an Independent Insurance Consultant selected by the District not less than every three years, which report is to state whether the anticipated funding of any self-insurance fund is sufficient, and if not, the required funding to obtain such result, and any such self-insurance coverage will be reviewed by the Independent Insurance Consultant not less frequently than annually. If the Independent Insurance Consultant determines in any such report that the anticipated funding of any self-insurance fund is not sufficient, the District covenants that it will undertake to fund such self-insurance fund in the manner recommended by the Independent Insurance Consultant.

#### **Insurance and Condemnation Proceeds**

- (a) Amounts that do not exceed 20% of the Net Book Value of the Property, Plant and Equipment of the District received by the District as insurance proceeds with respect to any casualty loss or as condemnation awards may be used in such manner as the District may determine, including, without limitation, applying such money to the partial payment or prepayment of any Indebtedness in accordance with the terms thereof and of any pertinent Supplement.
- (b) Amounts that exceed 20% of the Net Book Value of the Property, Plant and Equipment received by the District as insurance proceeds with respect to any casualty loss or as condemnation awards will be applied in such manner as the District may determine; provided, however, that the District is to notify the Trustee and within 12 months after the casualty loss or taking, deliver to the Trustee a report of an Independent Consultant stating the Independent Consultant's recommendations, including recommendations as to the use of such proceeds or awards, to cause the Long-Term Debt Service Coverage Ratio for each of the two periods of 12 full consecutive calendar months following the date on which such proceeds or awards are expected to have been fully applied to be not less than 120%, or, if in the opinion of the Independent Consultant the attainment of such level is impracticable, at the highest practicable level.

# **Annual Budget**

The District covenants that on or before the first day of the last month preceding the beginning of each Fiscal Year the Commission will adopt a budget of operating and non-operating revenues and expenses for the ensuing Fiscal Year.

# **Senior Trust Agreement**

The District covenants to observe the covenants of the Commission contained in the Senior Trust Agreement, which are expressly incorporated by reference by the Trust Agreement until there shall be no outstanding Senior Obligations. To the extent the covenants in the Trust Agreement and the covenants contained in the Senior Trust Agreement conflict, for so long as there shall be any outstanding Senior Obligations, the provisions of the covenants contained in the Senior Trust Agreement shall control.

## **Events of Default**

Events of Default under the Trust Agreement are as follows: (a) payment of the purchase price of any Bond shall not be made by the District when the same shall become due and payable; or (b) payment of any installment of interest on any Bond is not made by the District when the same becomes due and payable; or (c) payment of the principal of any Bond is not made by the District when the same becomes due and payable, whether at maturity or by acceleration or otherwise; or (d) default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the Trust Agreement or any Supplement to the Trust Agreement, including any covenant, condition, agreement or provision in the Trust Agreement applicable to the District and incorporated by reference in the Trust Agreement, and such default continues for 30 days after receipt by the District of a written notice from the Trustee specifying such default and requiring the same to be remedied; provided, however, if prior to the expiration of such 30 day period the District institutes action reasonably designed to cure such default, no Event of Default is to be deemed to have occurred upon the expiration of such 30-day period for so long as the District pursues such curative action with reasonable diligence and provided that such curative action can be completed within a reasonable time.

## **Remedies for Default**

Upon the happening and continuance of an Event of Default, the Trustee may take whatever action at law or in equity is necessary or desirable (i) in the case of an Event of Default specified in (a), (b) or (c) in the immediately proceeding paragraph, to collect the payments of interest installments or principal then due under the Trust Agreement or the Bonds, or (ii) in the case of an Event of Default specified in (d) in the immediately preceding paragraph, to enforce performance, observance or compliance by the District with any covenant, condition, agreement or provision under the Trust Agreement.

Upon the happening and continuance of an Event of Default, the Trustee may, and upon the written request of the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding is required to, by notice in writing to the District, declare the principal of all Bonds then Outstanding (if not then due and payable) to be due and payable immediately.

However, if at any time after the principal of Bonds has been declared to be due and payable, and before the entry of final judgment or decree in any suit, action or proceeding instituted on account of such default, or before the completion of the enforcement of any other remedy under the Trust Agreement, (i) money has accumulated in or has been paid into the Bond Fund sufficient to pay the principal of all matured Bonds and all arrears of interest, if any, upon all Bonds then Outstanding (except the principal of

any Bond not then due and payable by its terms and the interest accrued on such Bond since the last Interest Payment Date), and the charges, compensations, expenses, disbursements, advances and liabilities of the Trustee and (ii) all amounts then payable by the District under the Trust Agreement have been paid or a sum sufficient to pay the same has been deposited with the Trustee, and (iii) every other default known to the Trustee in the observance or performance of any covenant, condition or agreement contained in the Bonds or in the Trust Agreement (other than a default in the payment of the principal of such Bonds then due only because of a declaration of acceleration of maturities) has been remedied to the satisfaction of the Trustee, then the Trustee may, and upon the written request of the Holders of not less than a majority in aggregate principal amount of Bonds not then due and payable by their terms (Bonds then due and payable only because of a declaration of acceleration will not be deemed to be due and payable by their terms) and then Outstanding is required to, by written notice to the District, rescind and annul such declaration and its consequences, but no such rescission or annulment will extend to or affect any subsequent Event of Default or impair any right consequent thereon.

Upon the happening and continuance of an Event of Default, the Trustee may, and upon the written request of the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding, and upon satisfactory indemnification, is required to, proceed either at equity or at law, or by proceedings in the office of any board or officer having jurisdiction to protect and enforce its rights and the rights of the Holders under the laws of the Commonwealth of Virginia or under the Trust Agreement as the Trustee, being advised by counsel chosen by the Trustee, deems most effectual to protect and enforce such rights. The Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding, upon indemnification satisfactory to the Trustee, have the right to direct the method and place of all remedial proceedings to be taken by the Trustee, provided that such direction is in accordance with law and the provisions of the Trust Agreement.

## **Restrictions upon Actions by Individual Holders**

Except for the right of any Holder to enforce the payment of the principal of and interest on such Holder's Bond, no Holder will have any right to institute any suit, action or proceeding in equity or at law on any Bond or for the execution of any trust under the Trust Agreement or for any other remedy under the Trust Agreement unless (a) such Holder previously has given to the Trustee written notice of the particular Event of Default, (b) also the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding have made a request of the Trustee after the right to exercise such powers or right of action has accrued, and such Holder has afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted in the Trust Agreement or to institute such action, suit or proceedings in its or their name, and (c) there has been offered to the Trustee reasonable security and indemnity against the costs, expenses and liabilities (including attorney's fees, costs and expenses to be incurred therein or thereby, and the Trustee has refused or neglected to comply with such request within a reasonable time. Notwithstanding the foregoing provisions and without complying therewith, the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding may institute any such suit, action or proceeding in their own names for the benefits of all Holders of the Bonds.

#### **Notice of Default to Holders**

The Trustee is required to give written notice to all Holders of the occurrence of any Event of Default within 30 days after the Trustee has actual notice thereof, provided, however, except upon the occurrence of an Event of Default due to failure by the District to make payments of any installment of interest on or principal or purchase price of any Bond when the same become due and payable within 30 days after the Trustee received notice of the same, the Trustee may withhold such notice to the Holders if in its opinion such withholding is in the interest of the Holders.

# **Pro-Rata Application of Funds**

Notwithstanding anything in the Trust Agreement to the contrary, if at any time the money in the Bond Fund is not sufficient to pay the interest on or the principal of Bonds as the same become due and payable (either by their terms or by acceleration of maturities under the provisions of the Trust Agreement), such money, together with any money then available or thereafter becoming available for such purpose, is to be applied, subject to the compensation and indemnification to the Trustee and Bond Registrar, as follows:

(a) if the principal of all Bonds has not become or has not been declared due and payable, all such money in the Bond Fund is to be applied:

first: to the payment to the persons entitled thereto of all installments of interest on Bonds then due and payable in the order in which such installments became due and payable and, if the amount available is not sufficient to pay in full any particular installment, then to the payment, ratably according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in such Bonds;

second: to the payment to the persons entitled thereto of the unpaid principal of any Bonds that have become due and payable (other than Bonds called for redemption for the payment of which money is held pursuant to the provisions of the Trust Agreement), in the order of their due dates, and, if the amount available is not sufficient to pay in full the principal of Bonds due and payable on any particular date, then to the payment ratably according to the amount of such principal due on such date, to the persons entitled thereto without any discrimination or preference; and

third: to the payment of the interest on and the principal of Bonds, to the purchase and retirement of Bonds due to the redemption of Bonds in accordance with the Trust Agreement and the applicable Series Agreement.

- (b) If the principal of all Bonds has become or has been declared due and payable, all such money is to be applied to the payment of principal and interest then due upon the Bonds without preference to the persons entitled thereto, without preference or priority of principal over interest or interest over principal, or of any installment of interest over any other installment of interest or any Bond over any other Bond ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto, without any discrimination or preference.
- (c) If the principal of all Bonds has been declared due and payable and if such declaration is thereafter rescinded and annulled due to the remediation of an Event of Default, then, subject to the provisions described in paragraph (b) of this section, in the event that the principal of all Bonds later becomes due and payable or is declared due and payable, the money then remaining in and thereafter accruing to the Bond Fund is to be applied in accordance with the provisions described in paragraph (a) above.

## **Subordination**

Notwithstanding any other provision of the Trust Agreement to the contrary:

(a) In the event of any insolvency or bankruptcy proceedings, and any receivership, liquidation, reorganization or other similar proceedings in connection therewith, relative to the

District, as such, or to its property, and in the event of any proceedings for voluntary liquidation, dissolution or other winding up of the District, whether or not involving insolvency or bankruptcy, the holders of all Senior Obligations then outstanding shall be entitled to receive payment in full of all principal and interest due on all such Senior Obligations in accordance with the provisions of Senior Trust Agreement and the resolutions or other instruments authorizing their issuance before the Trustee and the Holders of the Parity Obligations are entitled to receive any payment from the Net Revenues Available for Debt Service or other money pledged to the Parity Obligations on account of principal (and premium, if any) or interest upon the Parity Obligations.

- (b) In the event that the Parity Obligations are declared due and payable before their stated maturity because of the occurrence of an Event of Default (under circumstances when the provisions described in paragraph (a) above are not applicable), the holders of all Senior Obligations outstanding at the time the Parity Obligations become due and payable because of such occurrence of such an Event of Default shall be entitled to receive payment in full of all principal and interest on all such Senior Obligations before the Holders of the Parity Obligations are entitled to receive any accelerated payment from the Net Revenues Available for Debt Service and other money pledged to the Parity Obligations of principal (and premium, if any) or interest upon the Parity Obligations.
- (c) If any event of default with respect to the Senior Obligations shall have occurred and be continuing (under circumstances when the provisions described in paragraph (a) above are not applicable), the holders of all such Senior Obligations then outstanding shall be entitled to receive payment in full of all principal and interest on all such Senior Obligations as the same become due and payable before the Holders of the Parity Obligations are entitled to receive, subject to the provisions of paragraph (e) below, any payment from the Net Revenues Available for Debt Service and other money pledged to the Parity Obligations under the Trust Agreement of principal (and premium, if any) or interest upon the Parity Obligations.
- (d) No holder of Senior Obligations shall be prejudiced in his right to enforce subordination of the Parity Obligations by any act or failure to act on the part of the District.
- The provisions described in paragraphs (a), (b), (c) and (d) above are solely for the purpose of defining the relative rights of the holders of the Senior Obligations on the one hand, and the Holders of Parity Obligations on the other hand, and nothing in the Trust Agreement is to impair, as between the District and the Holders of the Parity Obligations, the obligation of the District, which shall be unconditional and absolute, to pay to the Holders of the Parity Obligations the principal thereof and premium, if any, and interest on the Parity Obligations, respectively, in accordance with their terms, nor shall anything in the Trust Agreement prevent the Holders of the Parity Obligations from exercising all remedies otherwise permitted by applicable law or thereunder upon default thereunder, subject to the rights described in paragraphs (a), (b), (c) and (d) above of the holders of the Senior Obligations to receive cash, property or securities from the Net Revenues and other money pledged to such Senior Obligations otherwise payable or deliverable to the Holders of the Parity Obligations; and insofar as the Bond Registrar, Depository or Trustee is concerned, the foregoing provisions shall not prevent the application of any money deposited with the Bond Registrar, Depository or Trustee for the purpose of the payment of or on account of the principal (and premium, if any) and interest on the Parity Obligations if it did not have written notice or actual knowledge at the time of such application that such payment was prohibited by the foregoing provisions.

# **Supplemental Trust Agreements without Consent of Holders**

The District and the Trustee may without the consent of or notice to any of the Holders, enter into agreements supplemental to the Trust Agreement as are substantially consistent with the terms and provisions of the Trust Agreement:

- (a) to cure any ambiguity or formal defect or omission, to correct or supplement any provision of the Trust Agreement that may be inconsistent with any other provision of the Trust Agreement, to make any other provisions with respect to matters or questions arising under the Trust Agreement, or to modify, alter, amend, add to or rescind, in any particular, any of the terms or provisions contained in the Trust Agreement, or
- (b) to grant to or confer upon the Trustee for the benefit of the Holders any additional rights, remedies, powers, authority or security that may lawfully be granted to or conferred upon the Holders or the Trustee, or
- (c) to add to the provisions of the Trust Agreement other conditions, limitations and restrictions thereafter to be observed, or
- (d) to add to the covenants and agreements of the District in the Trust Agreement other covenants and agreements thereafter to be observed by the District or to surrender any right or power reserved in the Trust Agreement to or conferred upon the District, or
- (e) to permit the qualification of the Trust Agreement under any federal statute now or hereafter in effect or under any state Blue Sky law, and, in connection therewith, if the District so determines, to add to the Trust Agreement or any supplemental trust agreement such other terms, conditions and provisions as may be permitted or required by such federal statute or Blue Sky law, or
  - (f) to provide for the issuance of Bonds under a book-entry system, or
- (g) to make any other change in the Trust Agreement that, in the judgment of the District, expressed in a resolution of the Commission, and the Trustee, each of which may rely upon a written Opinion of Counsel, will not materially and adversely affect the Holders of the Bonds of each series that will be affected by such supplement.

# **Modification of Trust Agreement with Consent of Holders**

The Holders of not less than a majority of the aggregate principal amount of Bonds then Outstanding will have the right to consent to and approve the execution and delivery by the District and the acceptance by the Trustee of such trust agreement or trust agreements supplemental to the Trust Agreement as deemed necessary or desirable by the District for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, the Trust Agreement; provided, however, that nothing contained in the Trust Agreement will permit, or be construed as permitting (a) an extension of the maturity of the principal of or the interest on any Bonds issued under the Trust Agreement without the consent of the Holders of such Bonds, or (b) a reduction in the principal amount of any Bonds or the rate of interest thereon without the consent of the Holders of such Bonds, or (c) the creation of a pledge of receipts and revenues superior to the pledge created by the Trust Agreement without the consent of the Holders of all Bonds Outstanding, or (d) a preference or priority of any Bond over any other Bond without the consent of the Holders of all Bonds Outstanding, or (e) a reduction in the aggregate principal

amount of Bonds required for consent to such supplemental trust agreement without the consent of the Holders of all Bonds Outstanding.

If the District requests the Trustee to enter into any supplemental trust agreement described in the immediately preceding paragraph, the Trustee will cause notice of the proposed supplemental trust agreement to be mailed to all Holders. If the Holders of not less than a majority in aggregate principal amount of Bonds Outstanding at the time of the execution of such supplemental trust agreement have consented to and approved the execution, no Holder will have any right to object to the adoption of such supplemental trust agreement.

## **Defeasance**

(a) When the Bonds become due and payable and the whole amount of the principal and the interest so due and payable upon all Bonds is required to be paid, and (b) if the Bonds have not become due and payable, the Trustee or the Bond Registrar holds, sufficient money or Defeasance Obligations, or a combination of money and Defeasance Obligations, the principal of and the interest on which, when due and payable, will provide sufficient money to pay the principal of, and the interest on, all Bonds then Outstanding to the maturity date or dates of such Bonds and (c) sufficient funds also have been provided or provision has been made for paying all other obligations payable under the Trust Agreement by the District, then and in that case the right, title and interest of the Trustee in the funds and accounts mentioned in the Trust Agreement will thereupon cease, determine and become void and, on demand of the District and upon being furnished with an opinion, satisfactory to the Trustee, of counsel approved by the Trustee, to the effect that all conditions precedent to the release of the Trust Agreement have been satisfied, the Trustee will release the Trust Agreement and will execute such documents to evidence such release as may reasonably be required by the District and will turn over to the District any surplus in, and all balances remaining in, all funds and accounts.

Otherwise, the Trust Agreement will continue to be and remain in full force and effect; provided, that, in the event Defeasance Obligations are deposited with and held by the Trustee or the Bond Registrar as provided for above, (i) the Trustee will nevertheless retain such rights, powers and privileges under the Trust Agreement as may be necessary and convenient in respect of the Bonds for the payment of the principal and interest for which such Defeasance Obligations have been deposited, and (ii) the Bond Registrar will retain such rights, powers and privileges under the Trust Agreement as may be necessary and convenient for the registration, transfer and exchange of Bonds.

# **Release of Third Supplemental Trust Agreement**

When (a) the Series 2016A Bonds shall have become due and payable in accordance with their terms or otherwise as provided in the Third Supplemental Trust Agreement, the whole amount of the principal and the interest so due and payable upon all Series 2016A Bonds shall be paid, (b) if the Series 2016A Bonds shall not have become due and payable in accordance with their terms, the Trustee or the Bond Registrar shall hold, sufficient money or Defeasance Obligations, or a combination of money and Defeasance Obligations, the principal of and the interest on which, when due and payable, will provide sufficient money to pay the principal of, and the interest on, all Series 2016A Bonds then Outstanding to the maturity date or dates of such Series 2016A Bonds and (c) sufficient funds shall also have been provided or provision made for paying all other obligations payable under the Third Supplemental Trust Agreement by the District, then and in that case the right, title and interest of the Trustee in the funds and accounts mentioned in the Third Supplemental Trust Agreement shall thereupon cease, determine and become void and, on demand of the District and upon being furnished with an opinion, in form and substance satisfactory to the Trustee, of Bond Counsel, to the effect that all conditions precedent to the release of the Third Supplemental Trust Agreement and the defeasance of the Series 2016A Bonds have

been satisfied, the Trustee shall release the Third Supplemental Trust Agreement and shall execute such documents to evidence such release as may reasonably be required by the District and, subject to the provisions of the Trust Agreement, shall turn over to the District any surplus in, and all balances remaining in, all funds and accounts.

## **Removal of Trustee**

The Trustee may be removed at any time by an instrument or concurrent instruments in writing, (i) executed by the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding and filed with the District, or (ii) so long as no Event of Default has occurred and is continuing, an instrument executed by the District, not less than 60 days before such removal is to take effect as stated in said instrument or instruments. The Trustee may also be removed at any time for acting or proceeding in violation of, or for failing to act or proceed in accordance with, any provisions of the Trust Agreement with respect to the duties and obligations of the Trustee by any court of competent jurisdiction upon the application of the District or the Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding.



#### APPENDIX D

## PROPOSED OPINION OF BOND COUNSEL

| , 2016 |
|--------|
| , 2010 |

Hampton Roads Sanitation District Commission Virginia Beach, Virginia

We have examined Chapter 66 of the Acts of Assembly of Virginia of 1960, as amended (the "Act"), and certified copies of the proceedings of the Hampton Roads Sanitation District Commission (the "Commission"), the governing body of Hampton Roads Sanitation District (a political subdivision of the Commonwealth of Virginia and herein sometimes called the "District"), authorizing the execution and delivery of a Trust Agreement, dated as of October 1, 2011, as amended and restated on March 1, 2016, and as supplemented (the "Trust Agreement"), including as supplemented by the Third Supplemental Trust Agreement, dated as of March 1, 2016, each by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"), and the issuance of

# \$246,845,000 HAMPTON ROADS SANITATION DISTRICT

## Subordinate Wastewater Revenue Bonds, Series 2016A

Dated, maturing, subject to redemption, and bearing interest, all as provided in the Trust Agreement.

Pursuant to the Trust Agreement, as security for the payment of the amounts due on the above-captioned bonds (the "Bonds"), the District has pledged its Net Revenues Available for Debt Service to the Trustee. The District's Net Revenues Available for Debt Service consist of all revenues derived by the District from the Wastewater System (as defined in the Trust Agreement) except such part of such revenues as may be required to pay (i) the cost of maintaining, repairing and operating such Wastewater System and (ii) Senior Obligations.

For purposes of the opinions in paragraphs 1, 2 and 3 below, we have relied upon the opinion of Kellam, Pickrell, Cox, Tayloe & Anderson, A Professional Corporation, to the effect that the resolutions of the Commission authorizing the Bonds and approving the Trust Agreement were duly adopted.

We have also examined one of the Bonds, as executed and authenticated.

Based upon such examination, we are of the opinion that:

- 1. The Bonds have been duly authorized, executed and issued for the purpose of providing funds, together with other available funds, to finance certain improvements included as part of the District's Capital Improvement Program, to refund certain Outstanding Senior Obligations (as defined in the Trust Agreement) and to repay certain Junior Obligations (as defined in the Trust Agreement).
- 2. The Trust Agreement has been duly authorized and executed by the District and, assuming due authorization and execution by the Trustee, is a valid, binding and enforceable obligation of the District in accordance with its terms.

- 3. The Bonds are valid and binding special obligations of the District payable solely from the Net Revenues Available for Debt Service and other funds pledged as security therefor under the Trust Agreement.
- 4. The Bonds do not constitute a debt of the Commonwealth of Virginia or of any county, city, town or political subdivision thereof, or a pledge of the faith and credit of the Commonwealth of Virginia or of any county, city, town or political subdivision thereof. The issuance of the Bonds does not directly or indirectly or contingently obligate the Commonwealth of Virginia or any county, city, town or political subdivision thereof to levy or to pledge any form of taxation whatever therefor.
- 5. Assuming compliance by the District with its covenant to comply with the requirements of the Internal Revenue Code of 1986, as amended (the "Code"), with respect to the Bonds, and except as provided in the following sentence, interest on the Bonds is not includable in the gross income of the owners of the Bonds for purposes of federal income taxation under current law. Interest on the Bonds will be includable in the gross income of the owners thereof retroactive to the date of issue of the Bonds in the event of a failure by the District to comply with applicable requirements of the Code, and its covenants regarding use, expenditure, and investment of proceeds of the Bonds and the timely payment of certain investment earnings to the United States Treasury. We render no opinion as to the exclusion from gross income of the interest on the Bonds for federal income tax purposes on or after the date on which any action is taken affecting such covenants upon the approval of counsel other than ourselves. Interest on the Bonds is not an item of tax preference for purposes of the federal individual or corporate alternative minimum tax. Such interest will, however, be included in the calculation of the federal alternative minimum tax imposed on corporations by the Code. The Code contains other provisions that could result in tax consequences, as to which we express no opinion, as a result of ownership of the Bonds or the inclusion in certain computations (including without limitation those related to the corporate alternative minimum tax) of interest that is excluded from gross income.
- 6. As provided by the Act, the Bonds, their transfer and the income therefrom, including any profit made on the sale thereof, shall be free and exempt from taxation by the Commonwealth of Virginia and any political subdivision thereof.

The enforceability of the Trust Agreement and the obligations of the District with respect to such documents described above are subject to bankruptcy, insolvency, fraudulent conveyance, reorganization and other laws affecting creditors' rights generally. To the extent that the remedies under the Trust Agreement require enforcement by a court of equity, the enforceability thereof may be limited by such principles of equity as the court having jurisdiction may impose.

Respectfully submitted,

## **APPENDIX E**

## FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (this "Disclosure Agreement"), dated as of March \_, 2016, is executed and delivered by Hampton Roads Sanitation District (the "District") in connection with the issuance by the District of its Subordinate Wastewater Revenue Bonds, Series 2016A (the "Bonds"), pursuant to the provisions of an Amended and Restated Trust Agreement, dated as of March 1, 2016, as supplemented (the "Trust Agreement"), by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee. The proceeds of the Bonds are being used by the District to provide funds for to finance a portion of the District's capital improvement program, to refinance outstanding advances received by the District under a line of credit and refund certain senior indebtedness. The District hereby covenants and agrees as follows:

- SECTION 1. <u>Purpose of the Disclosure Agreement</u>. This Disclosure Agreement is being executed and delivered by the District for the benefit of the holders of the Bonds and in order to assist the Participating Underwriters (defined below) in complying with the Rule (defined below). The District acknowledges that it is undertaking primary responsibility for any reports, notices or disclosures that may be required under this Disclosure Agreement.
- SECTION 2. <u>Definitions</u>. In addition to the definitions set forth in the Trust Agreement, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:
- "Annual Report" shall mean any Annual Report provided by the District pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.
- "Dissemination Agent" shall mean the District, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the District and which has filed with the District a written acceptance of such designation.
  - "Filing Date" shall have the meaning given to such term in Section 3(A) hereof.
- "Fiscal Year" shall mean the twelve-month period at the end of which financial position and results of operations are determined. Currently, the District's Fiscal Year begins July 1 and continues through June 30 of the next calendar year.
- "Holder" or "holder" shall mean, for purposes of this Disclosure Agreement, any person who is a record owner or beneficial owner of a Bond.
- "Listed Events" shall mean any of the events listed in subsection (b)(5)(i)(C) of the Rule, which are as follows:
  - (i) principal and interest payment delinquencies;
  - (ii) non-payment related defaults, if material;
  - (iii) unscheduled draws on debt service reserves reflecting financial difficulties;
  - (iv) unscheduled draws on credit enhancements reflecting financial difficulties;

- (v) substitution of credit or liquidity providers, or their failure to perform;
- (vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Notes, or other material events affecting the tax status of the Notes;
- (vii) modifications to rights of security holders, if material;
- (viii) bond calls, if material, and tender offers;
- (ix) defeasances;
- (x) release, substitution, or sale of property securing repayment of the Notes, if material;
- (xi) rating changes;
- (xii) bankruptcy, insolvency, receivership or similar event of the District;
- (xiii) the consummation of a merger, consolidation, or acquisition involving the District or the sale of all or substantially all of the assets of the District, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and appointment of a successor or additional paying agent or the change of name of a paying agent, if material; and
- (xiv) appointment of a successor or additional paying agent or the change of name of a paying agent, if material.

"Participating Underwriter" shall mean each original underwriter of the Bonds required to comply with the Rule in connection with the offering of such Bonds.

"Repository" shall mean The Electronic Municipal Market Access ("EMMA") system administered by the Municipal Securities Rulemaking Board. EMMA is recognized as the sole Repository for purposes of the Rule.

"Rule" shall mean Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

# SECTION 3. Provision of Annual Reports.

A. The District shall, or shall cause the Dissemination Agent to, provide to the Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. Such Annual Report shall be filed on a date (the "Filing Date") that is not later than December 31 after the end of any Fiscal Year (commencing with its Fiscal Year ending June 30, 2016). Not later than ten (10) days prior to the Filing Date, the District shall provide the Annual Report to the Dissemination Agent (if applicable). In such case, the Annual Report (i) may be submitted as a single document or as separate documents comprising a package, (ii) may cross-reference other information as provided in Section 4 of this Disclosure Agreement and (iii) shall include the District's audited financial statements or, if audited

financial statements are not available, such unaudited financial statements as may be required by the Rule. In any event, audited financial statements of the District must be submitted, if and when available, together with or separately from the Annual Report.

- B. The annual financial statements of the District shall be prepared on the basis of generally accepted accounting principles and will be audited. Copies of the audited annual financial statements, which may be filed separately from the Annual Report, will be filed with the Repository when they become publicly available.
- C. If the District fails to provide an Annual Report to the Repository by the date required in subsection A hereto or to file its audited annual financial statements with the Repository when they become publicly available, the District shall send a notice to the Repository in substantially the form attached hereto as Exhibit B.
- SECTION 4. <u>Content of Annual Reports</u>. Except as otherwise agreed, any Annual Report required to be filed hereunder shall contain or incorporate by reference, at a minimum, annual financial information relating to the District, including operating data, updating such information relating to the District as described in Exhibit A, all with a view toward assisting the Participating Underwriter in complying with the Rule.

Any or all of such information may be incorporated by reference from other documents, including official statements of securities issues with respect to which the District is an "obligated person" (within the meaning of the Rule), which have been filed with the Repository or the Securities and Exchange Commission. If the document incorporated by reference is a final official statement, it must be available from the Repository. The District shall clearly identify each such other document so incorporated by reference.

- SECTION 5. <u>Reporting of Listed Events</u>. The District will provide in a timely manner, not in excess of ten business days after the occurrence of the event, to the Repository, notice of any of the Listed Events, if material.
- SECTION 6. <u>Termination of Reporting Obligation</u>. The District's obligations under this Disclosure Agreement shall terminate upon the earlier to occur of the legal defeasance and final retirement of all the Bonds.
- SECTION 7. <u>Dissemination Agent</u>. The District may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. If at any time there is not any other designated Dissemination Agent, the District shall be the Dissemination Agent.
- SECTION 8. <u>Amendment</u>. Notwithstanding any other provision of this Disclosure Agreement, the District may amend this Disclosure Agreement, if such amendment is supported by an opinion of independent counsel with expertise in federal securities laws, to the effect that such amendment is permitted or required by the Rule.
- SECTION 9. <u>Additional Information</u>. Nothing in this Disclosure Agreement shall be deemed to prevent the District from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the District chooses to include any information in any Annual

Report or notice of occurrence of a Listed Event, in addition to that which is specifically required by this Disclosure Agreement, the District shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. <u>Default</u>. Any person referred to in Section 12 (other than the District) may take such action as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to file its Annual Report or to give notice of a Listed Event. The holders of not less than a majority in aggregate principal amount of Bonds Outstanding may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to challenge the adequacy of any information provided pursuant to this Disclosure Agreement, or to enforce any other obligation of the District hereunder. A default under this Disclosure Agreement shall not be deemed an event of default under the Trust Agreement or the Bonds, and the sole remedy under this Disclosure Agreement in the event of any failure of the District to comply herewith shall be an action to compel performance. Nothing in this provision shall be deemed to restrict the rights or remedies of any holder pursuant to the Securities Exchange Act of 1934, the rules and regulations promulgated thereunder, or other applicable laws.

SECTION 11. <u>Format of Filings</u>. Unless otherwise required by the Repository, all notice, documents and information provided to the Repository pursuant to this Disclosure Agreement shall be provided to EMMA, the current Internet address of which is www.emma.msrb.org. All notices, documents and information provided to the EMMA shall be provided in an electronic format prescribed by the Repository (currently, portable document format (pdf) which must be word-searchable except for non-textual elements) and shall be accompanied by identifying information as prescribed by the Repository.

SECTION 12. <u>Beneficiaries</u>. This Disclosure Agreement shall inure solely to the benefit of the District, the Participating Underwriters and the holders from time to time of the Bonds, and shall create no rights in any other person or entity.

HAMPTON ROADS SANITATION DISTRICT

| By: |                     |  |
|-----|---------------------|--|
|     | Director of Finance |  |

# CONTENT OF ANNUAL REPORT HAMPTON ROADS SANITATION DISTRICT

- (a) **Financial Information**. Updated information including summary financial results, treatment charge collection rate, revenue collections from the District's largest customers, and a five-year comparison of revenues, expenses, debt service and debt service coverage ratios.
- (b) **Debt Information**. Updated information including the debt service requirements of long-term indebtedness.
- (c) **Operating Data.** Updated operating data including wastewater flows to the Wastewater System and its major treatment plants, the treatment capacities of its major treatment plants, total billed wastewater flows, and changes in rates and charges.

In general, the foregoing will include information as of the end of the most recent fiscal year or as of the most recent practicable date. Where information for the fiscal year just ended is provided, it may be preliminary and unaudited. Where information has historically been provided for more than a single period, comparable information will in general be provided for the same number of periods where valid and available. Where comparative demographic or economic information for the District and the United States as a whole is contemporaneously available and, in the judgment of the District, informative, such information may be included. Where, in the judgment of the District, an accompanying narrative is required to make data presented not misleading, such narrative will be provided.

# NOTICE OF FAILURE TO FILE ANNUAL REPORT [AUDITED ANNUAL FINANCIAL STATEMENTS]

# Re: HAMPTON ROADS SANITATION DISTRICT SUBORDINATE WASTEWATER REVENUE BONDS, SERIES 2016A

| CUSIP N | 0.: |
|---------|-----|
|---------|-----|

Dated:

| Annual Report [Audited Annual Financial State Disclosure Agreement, which was entered into in of which were used to finance a portion of the I | inpton Roads Sanitation District has not provided an ements] as required by Section 3 of the Continuing connection with the above-named bonds, the proceeds District's capital improvement program. [The District I Financial Statements] will be filed by] |
|--|---|
| Dated:   |   |
| Н  | AMPTON ROADS SANITATION DISTRICT  |
| B  | y   |

## **APPENDIX F**

#### THE DEPOSITORY TRUST COMPANY

The Depository Trust Company (DTC), the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provision of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 2.2 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized bookentry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC, in turn, is owned by a number of Direct Participants of DTC and Members of the National Securities Clearing Corporation, Fixed Income Clearing Corporation, and Emerging Markets Clearing Corporation, (NSCC, FICC, and EMCC, also subsidiaries of DTCC), as well as by the New York Stock Exchange, Inc., the American Stock Exchange LLC, and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 2016A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2016A Bonds on DTC's records. The ownership interest of each actual purchaser of each Subordinate 2016A Bond (the "Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2016A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2016A Bonds, except if use of the book-entry system for the Series 2016A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2016A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2016A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2016A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2016A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial

Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of the Series 2016A Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2016A Bonds unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the District as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2016A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, if any, and interest payments on the Series 2016A Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the District on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC nor its nominee, or the District, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, if any, and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the District, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

