

*In the opinion of Orrick, Herrington & Sutcliffe LLP, Special Tax Counsel to the Initial Purchaser, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2017A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Special Tax Counsel, interest on the Series 2017A Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Special Tax Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Special Tax Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Series 2017A Bonds. See “TAX MATTERS.”*



**\$69,420,000**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
(Alameda and Contra Costa Counties, California)**

**WASTEWATER SYSTEM REVENUE/REFUNDING BONDS, SERIES 2017A**

**Dated: Date of Delivery**

**Due: June 1, as shown on inside cover page**

*This cover page contains certain information for general reference only. It is not intended to be a summary of the security or terms of this issue. Investors are advised to read the entire Official Statement to obtain information essential to the making of an informed investment decision. Capitalized terms used on this cover page and not otherwise defined shall have the meanings set forth herein.*

The East Bay Municipal Utility District (the “District”) is issuing its Wastewater System Revenue/Refunding Bonds, Series 2017A (the “Series 2017A Bonds”) pursuant to a Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, by and between the District and First Interstate Bank of California, which has been succeeded by The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”), as amended and supplemented, including as amended and supplemented by a Nineteenth Supplemental Indenture, dated as of June 1, 2017, providing for the issuance of the Series 2017A Bonds (collectively, the “Indenture”). The Series 2017A Bonds will be issued in fully-registered form, without coupons, initially registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the Series 2017A Bonds. Beneficial ownership interests in the Series 2017A Bonds may be purchased in book-entry form only in denominations of \$5,000 principal amount or any integral multiple thereof. Interest on the Series 2017A Bonds is payable semiannually on June 1 and December 1 of each year, commencing December 1, 2017. Principal is payable on June 1 of the years set forth on the inside front cover page. The principal or redemption price of, and interest on, the Series 2017A Bonds are payable by the Trustee to DTC, which is obligated in turn to remit such principal or redemption price and interest to the DTC participants for subsequent disbursement to the beneficial owners of the Series 2017A Bonds. See APPENDIX E – “DTC AND THE BOOK-ENTRY ONLY SYSTEM.”

*The Series 2017A Bonds are subject to redemption prior to maturity as more fully described herein. See “THE SERIES 2017A BONDS – Redemption.”*

The Series 2017A Bonds are being issued for the purpose of (i) providing moneys to finance and/or reimburse the District for certain costs of improvements to the Wastewater System of the District, (ii) refunding all or a portion of various series of the District’s outstanding Wastewater System revenue bonds, and (iii) paying costs of issuance in connection with the Series 2017A Bonds, as described herein. See “PLAN OF FINANCE.”

The Series 2017A Bonds are special obligations of the District, payable solely from and secured by a pledge of Subordinated Wastewater Revenues as more fully described herein. Subordinated Wastewater Revenues generally consist of the District’s Wastewater Revenues (adjusted for deposits to and withdrawals from the Rate Stabilization Fund) remaining after the payment of all Wastewater Operation and Maintenance Costs. The Series 2017A Bonds have been issued on parity with the District’s Wastewater System Revenue Bonds and Parity Debt heretofore or hereafter issued, as more fully described herein. There are no Senior Wastewater Bonds remaining outstanding and the District has covenanted that it will not issue any Senior Wastewater Bonds in the future. The District also operates a Water System. The Series 2017A Bonds are not payable from or secured by the revenues of the Water System of the District. **Neither the full faith and credit nor the taxing power of the District is pledged to the payment of the Series 2017A Bonds or the interest thereon.**

**MATURITY SCHEDULE  
(SEE INSIDE COVER)**

*The Series 2017A Bonds were sold to US Bancorp (the “Initial Purchaser”) by competitive sale on June 1, 2017. The Series 2017A Bonds will be offered when, as and if sold and received by the Initial Purchaser, subject to the approval of validity by Norton Rose Fulbright US LLP, Los Angeles, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the District by its General Counsel. Orrick, Herrington & Sutcliffe LLP, San Francisco, California, is serving as Special Tax Counsel to the Initial Purchaser. Montague DeRose and Associates, LLC and Backstrom McCarley Berry & Co., LLC are serving as co-municipal advisors to the District in connection with the Series 2017A Bonds. It is anticipated that the Series 2017A Bonds will be available for delivery through the facilities of DTC in New York, New York by Fast Automated Securities Transfer (FAST) on or about June 14, 2017.*

Dated: June 1, 2017

**\$69,420,000**  
**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**(Alameda and Contra Costa Counties, California)**  
**WASTEWATER SYSTEM REVENUE/REFUNDING BONDS, SERIES 2017A**

**MATURITY SCHEDULE**

**\$64,335,000 Serial Series 2017A Bonds**

<b>Maturity Date (June 1)</b>	<b>Principal Amount</b>	<b>Interest Rate</b>	<b>Yield</b>	<b>CUSIP<sup>†</sup></b>
2018	\$ 2,890,000	5.00%	0.76%	271012FM3
2019	2,955,000	5.00	0.84	271012FN1
2020	1,910,000	5.00	0.93	271012FP6
2021	4,360,000	5.00	1.04	271012FQ4
2022	4,495,000	5.00	1.16	271012FR2
2023	4,735,000	5.00	1.30	271012FS0
2024	4,975,000	5.00	1.42	271012FT8
2025	5,220,000	5.00	1.60	271012FU5
2026	5,495,000	5.00	1.77	271012FV3
2027	5,020,000	5.00	1.88	271012FW1
2028	10,525,000	5.00	1.98 <sup>(c)</sup>	271012FX9
2029	1,060,000	4.00	2.18 <sup>(c)</sup>	271012FY7
2030	695,000	4.00	2.27 <sup>(c)</sup>	271012FZ4
2031	950,000	4.00	2.36 <sup>(c)</sup>	271012GA8
2032	1,320,000	4.00	2.48 <sup>(c)</sup>	271012GB6
2033	1,390,000	4.00	2.58 <sup>(c)</sup>	271012GC4
2034	1,450,000	4.00	2.67 <sup>(c)</sup>	271012GD2
2035	1,535,000	4.00	2.74 <sup>(c)</sup>	271012GE0
2036	1,625,000	4.00	2.78 <sup>(c)</sup>	271012GF7
2037	1,730,000	4.00	2.82 <sup>(c)</sup>	271012GG5

**\$5,085,000 4.00% Term Series 2017A Bonds due June 1, 2045, Yield 2.95%<sup>(c)</sup>; CUSIP<sup>†</sup>: 271012GH3**

<sup>(c)</sup> Yield to par call date of June 1, 2027.

<sup>†</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services, managed by S&P Capital IQ on behalf of the American Bankers Association. CUSIP numbers have been assigned by an independent company not affiliated with the District or the Initial Purchaser and are included solely for the convenience of the holders of the Series 2017A Bonds. Neither the District nor the Initial Purchaser is responsible for the selection or use of these CUSIP numbers and no representation is made as to their correctness on the Series 2017A Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2017A Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of the Series 2017A Bonds.

**EAST BAY MUNICIPAL UTILITY DISTRICT**

Alameda and Contra Costa Counties, California  
375 Eleventh Street  
Oakland, California 94607  
(866) 403-2683

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**Co-Bond Counsel**

Norton Rose Fulbright US LLP  
Los Angeles, California  
  
Curls Bartling P.C.  
Oakland, California

**Co-Municipal Advisors**

Montague DeRose and Associates, LLC  
Walnut Creek, California  
  
Backstrom McCarley Berry & Co., LLC  
San Francisco, California

**Trustee**

The Bank of New York Mellon Trust Company, N.A.  
San Francisco, California

**Verification Agent**

Grant Thornton LLP  
Minneapolis, Minnesota

No dealer, broker, salesperson or other person has been authorized by the District to give any information or to make any representation other than as set forth herein and, if given or made, such other information or representation must not be relied upon as having been authorized by the District. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the Series 2017A Bonds by a person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale. This Official Statement is not to be construed as a contract with the purchasers of the Series 2017A Bonds. Statements contained in this Official Statement which involve estimates, forecasts or matters of opinion, whether or not expressly so described herein, are intended solely as such and are not to be construed as representations of facts.

The information set forth in this Official Statement has been obtained from official sources and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall under any circumstances create any implication that there has been no change in the affairs of the District since the date hereof.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access (EMMA) website. The District also maintains a website. However, the information presented therein is not part of this Official Statement and must not be relied upon in making an investment decision with respect to the Series 2017A Bonds.

IN CONNECTION WITH THIS OFFERING, THE INITIAL PURCHASER MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2017A BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

**CERTAIN STATEMENTS CONTAINED IN THIS OFFICIAL STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND “FORWARD-LOOKING STATEMENTS.” NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS “ESTIMATE”, “PROJECT”, “ANTICIPATE”, “EXPECT”, “INTEND”, “BELIEVE” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS OFFICIAL STATEMENT.**

References to web site addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader’s convenience. Unless specified otherwise, such web sites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement for purposes of, and as that term is defined in, Securities and Exchange Commission Rule 15c2-12.

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## **OFFICIAL STATEMENT**

**\$69,420,000**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
(Alameda and Contra Costa Counties, California)**

**WASTEWATER SYSTEM REVENUE/REFUNDING BONDS, SERIES 2017A**

### **INTRODUCTION**

*This Introduction is not a summary of this Official Statement, and is qualified by more complete and detailed information contained in the entire Official Statement. A full review should be made of the entire Official Statement, including the cover page and attached appendices. The offering of Series 2017A Bonds to potential investors is made only by means of the entire Official Statement. Certain definitions of capitalized terms used and not defined herein are set forth in APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”*

#### **Purpose**

The purpose of this Official Statement, which includes the cover page and appendices hereto, is to set forth certain information concerning the East Bay Municipal Utility District (the “District”), the wastewater interception, treatment and disposal system owned by the District (the “Wastewater System” or the “System”), and System finances, in connection with the sale of the District’s \$69,420,000 Wastewater System Revenue/Refunding Bonds, Series 2017A (the “Series 2017A Bonds”). The Series 2017A Bonds are being issued pursuant to the Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, by and between the District and First Interstate Bank of California, which has been succeeded by The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”), as amended and supplemented, including as amended and supplemented by the Nineteenth Supplemental Indenture, dated as of June 1, 2017, by and between the District and the Trustee, relating to the Series 2017A Bonds (as so amended and supplemented, the “Indenture”).

The Series 2017A Bonds are being issued for the purpose of (i) providing moneys to finance and/or reimburse the District for certain costs of improvements to the Wastewater System of the District, (ii) refunding all or a portion of various series of the District’s outstanding Wastewater System revenue bonds, and (iii) paying costs incidental to the issuance of the Series 2017A Bonds. See “PLAN OF FINANCE” and APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – THE WASTEWATER SYSTEM – Capital Improvement Program.”

#### **The District**

The District is a municipal utility district, created in 1923 by vote of the electorate in portions of Alameda and Contra Costa Counties in the State of California (the “State”). The District is formed under the authority of the Municipal Utility District Act, constituting Division 6 of the Public Utilities Code of the State, commencing with Section 11501 (the “Municipal Utility District Act”). Pursuant to the Municipal Utility District Act, the District is empowered to own and operate the Wastewater System. See APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM).” The District also operates a water system (the “Water System”).

The Series 2017A Bonds are not payable from or secured by the revenues of the Water System of the District.

## Security for the Series 2017A Bonds

The Series 2017A Bonds are special obligations of the District, payable solely from and secured by a pledge of the Subordinated Wastewater Revenues of the District, as defined in the Indenture. Subordinated Wastewater Revenues generally consist of the District's Wastewater Revenues (adjusted for deposits to and withdrawals from the Rate Stabilization Fund) remaining after the payment of (a) all Wastewater Operation and Maintenance Costs and (b) all amounts required to be paid under the District's Senior Wastewater Bond Resolution for principal, interest, reserve fund and any other debt service requirements on the Senior Wastewater Bonds. **There are no Senior Wastewater Bonds currently outstanding and the District has covenanted pursuant to the Twelfth Supplemental Indenture, dated as of September 15, 2010 (the "Twelfth Supplemental Indenture") that it will not issue any Senior Wastewater Bonds in the future.** Prior to the date of execution and delivery of the Twelfth Supplemental Indenture, all Wastewater System revenue bonds of the District issued under the Indenture were designated "Wastewater System Subordinated Revenue Bonds." Pursuant to the Twelfth Supplemental Indenture, any Wastewater System revenue bonds of the District issued (or remarketed or otherwise reoffered) under the Indenture following the execution and delivery of the Twelfth Supplemental Indenture are designated "Wastewater System Revenue Bonds" in order to reflect that the lien of the Senior Wastewater Bonds has been closed. All Outstanding Wastewater System revenue bonds issued under the Indenture (howsoever designated), together with any additional Wastewater System revenue bonds hereafter issued under the Indenture are secured on parity by Subordinated Wastewater Revenues and are collectively referred to herein as the "Wastewater System Revenue Bonds." See "SECURITY FOR THE SERIES 2017A BONDS – Pledge of Subordinated Wastewater Revenues."

The Series 2017A Bonds are secured on parity with the District's other Wastewater System Revenue Bonds to be Outstanding upon the delivery thereof, together with any additional Wastewater System Revenue Bonds hereafter issued and with any other Parity Debt (which may include payment obligations under interest rate swap agreements) heretofore or hereafter incurred in accordance with the Indenture. See "SECURITY FOR THE SERIES 2017A BONDS – Outstanding Wastewater System Revenue Obligations," and "– Issuance of Additional Wastewater System Revenue Bonds and Parity Debt; Junior and Subordinate Obligations." As of May 1, 2017, the District had Outstanding \$388,530,000 aggregate principal amount of Wastewater System Revenue Bonds. See APPENDIX A – "THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Outstanding Debt." See also "PLAN OF FINANCE – Refunding of the Refunded Bonds."

The Thirteenth Supplemental Indenture dated as of October 1, 2010 (the "Thirteenth Supplemental Indenture") includes a number of amendments to the Indenture, which amendments are to be effective upon the first date upon which all of the Outstanding Wastewater System Revenue Bonds issued prior to the date of the Thirteenth Supplemental Indenture have been paid and discharged in accordance with their terms. **Such amendments contained in the Thirteenth Supplemental Indenture will become effective upon the delivery of the 2017A Bonds and the defeasance of the Refunded 2007B Bonds (see "PLAN OF FINANCE – Refunding of the Refunded Bonds").** The terms of the Indenture as described herein and in APPENDIX C – "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" reflect the effectiveness of such amendments and describe terms of the Indenture as otherwise amended and as amended by the Thirteenth Supplemental Indenture.

**NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE DISTRICT IS PLEDGED TO THE PAYMENT OF THE SERIES 2017A BONDS OR THE INTEREST THEREON.**

## **Rate Covenant**

The District covenants under the Indenture that it will at all times, while any of the Wastewater System Revenue Bonds (including the Series 2017A Bonds) remain Outstanding, fix, prescribe and collect rates, fees and charges in connection with the services and facilities furnished by the Wastewater System so as to yield Wastewater Revenues in each Fiscal Year sufficient so that the Subordinated Wastewater Revenues for such year shall be at least equal to 1.1 times the amount of Debt Service on all Wastewater System Revenue Bonds and Parity Debt for such Fiscal Year. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Covenants.” See also “CONSTITUTIONAL AND STATUTORY LIMITATIONS ON TAXES AND APPROPRIATIONS.”

## **Continuing Disclosure**

Pursuant to a Continuing Disclosure Agreement, dated the date of delivery of the Series 2017A Bonds, by and between the District and the Trustee, as dissemination agent, the District will covenant and agree for the benefit of the holders and beneficial owners of the Series 2017A Bonds to provide certain financial information and operating data relating to the District and the Wastewater System by not later than 180 days following the end of the District’s Fiscal Year (which currently begins on July 1 and ends on June 30 of each year) (the “Annual Report”), commencing with the Annual Report for Fiscal Year 2016-17, and to provide notices of the occurrence of certain specified events. The Annual Report and the notices of specified events will be filed by the Trustee on behalf of the District with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access system (“EMMA”). See “CONTINUING DISCLOSURE.” These covenants have been made in order to assist the Initial Purchaser in complying with Securities and Exchange Commission Rule 15c2-12(b)(5). See also APPENDIX F – “FORM OF CONTINUING DISCLOSURE AGREEMENT.”

As of the date hereof, the District is in compliance in all material respects with its continuing disclosure undertakings for the last five years. Filings through EMMA are linked to a particular issue of obligations by CUSIP number (which is subject to change after the issuance of obligations as a result of various subsequent actions). The District uses its best efforts to confirm that each report filed through EMMA is linked to all the correct 9-digit CUSIP numbers. However, as a technical matter, it has come to the District’s attention that certain filings during the past five years (primarily certain Annual Reports), when made, were not appropriately linked to all applicable CUSIP numbers. The District has since linked the applicable filings to the additional CUSIPs.

## **Professionals Involved in the Issue**

The Bank of New York Mellon Trust Company, N.A. serves as Trustee under the Indenture. Certain legal matters incident to the authorization, issuance and sale of the Series 2017A Bonds are subject to the approval of Norton Rose Fulbright US LLP, Los Angeles, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel. Certain legal matters will be passed upon for the District by its General Counsel. Orrick, Herrington & Sutcliffe LLP, San Francisco, California, is serving as Special Tax Counsel to the Initial Purchaser in connection with the Series 2017A Bonds. Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCarley Berry & Co., LLC, San Francisco, California, are serving as co-municipal advisors to the District in connection with the issuance of the Series 2017A Bonds.

## **Summaries Not Definitive**

The summaries and references to all documents, statutes, reports and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary or reference is qualified in its entirety by reference to each such document, statute, report or instrument. The capitalization of any word not conventionally capitalized or otherwise defined herein, indicates that such word is defined in the Indenture and, as used herein, has the meaning given to it in the Indenture. Unless otherwise indicated, all financial and statistical information herein has been provided by the District.

All references to and summaries of the Indenture, the Escrow Agreements and all documents, statutes, reports and other instruments referred to herein are qualified in their entirety by reference to the full Indenture, the Escrow Agreements and each such document, statute, report or instrument, respectively, copies of which are available for inspection at the offices of the District in Oakland, California, and will be available from the Trustee upon request and payment of duplication costs. Forward-looking statements in this Official Statement are subject to risks and uncertainties. Actual results may vary from forecasts or projections contained herein if events and circumstances do not occur as projected, and such variances may be material.

## **Additional Information**

The District regularly prepares a variety of publicly available reports, including audits, budgets and related documents. Any Series 2017A Bondholder may obtain a copy of any such report, as available, from the Trustee or the District. Additional information regarding this Official Statement may be obtained by contacting the Trustee or Sophia D. Skoda, Director of Finance, East Bay Municipal Utility District, 375 Eleventh Street, Oakland, California 94607, (510) 287-0231.

## **THE DISTRICT**

The District is a municipal utility district, created in 1923 by vote of the electorate in portions of Alameda and Contra Costa Counties in the State of California. The District is formed under the authority of the Municipal Utility District Act. Under the Municipal Utility District Act, municipal utility districts are empowered to acquire, construct, own, operate or control works for supplying the district and public agencies in the district with light, water, power, heat, transportation, telephone service or other means of communications, means for the collection, treatment or disposition of garbage, sewage or refuse matter, and public recreation facilities appurtenant to its reservoirs and may do all things necessary and convenient to the full exercise of powers granted in the Municipal Utility District Act. The District presently exercises only those functions relating to water supply, power generation and recreational facilities through its Water System, and, within an area known as Special District No. 1, sewerage and wastewater interception, treatment and disposal, and power generation through its Wastewater System. Special District No. 1 covers only a portion of the service area of the District. The District presently does not intend to exercise other functions. Such other functions and the related facilities, if exercised, would not constitute part of the Water System or the Wastewater System.

For information on the District, the Wastewater System and its finances and operations, see APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM)” and APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015.”

## **PLAN OF FINANCE**

### **Purpose of the Series 2017A Bonds**

The Series 2017A Bond proceeds will be used to (i) provide moneys to finance and/or to reimburse the District for certain costs of improvements to the Wastewater System, (ii) refund (a) all of the District's Wastewater System Subordinated Revenue Refunding Bonds, Series 2007B (the "Refunded 2007B Bonds") maturing on and after June 1, 2018, and (b) a portion of the District's Wastewater System Subordinated Revenue/Refunding Bonds, Series 2010A (the "Refunded Series 2010A Bonds," and together with the Refunded Series 2007B Bonds, the "Refunded Bonds"), and (iii) pay the costs of issuance in connection with the Series 2017A Bonds.

### **Financing of Capital Improvements**

The improvements to be financed with proceeds of the Series 2017A Bonds have been and are being undertaken as a part of the District's capital improvement program. For additional information regarding the District's current capital improvement program, and a description of the major programs and projects included therein, see APPENDIX A – "THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – THE WASTEWATER SYSTEM – Capital Improvement Program."

### **Refunding of the Refunded Bonds**

The District's Wastewater System Subordinated Revenue Refunding Bonds, Series 2007B (the "Series 2007B Bonds") were issued on June 6, 2007 in the aggregate principal amount of \$46,670,000 to refund certain Bonds previously issued by the District. As of May 1, 2017, \$26,920,000 aggregate principal amount of the Series 2007B Bonds remained outstanding. A portion of the proceeds of the Series 2017A Bonds will be used to redeem on July 3, 2017, the \$23,915,000 outstanding aggregate principal amount of the Series 2007B Bonds maturing on and after June 1, 2018. Series 2007B Bonds in the principal amount of \$3,005,000 matured on June 1, 2017, and were paid on such maturity date from funds held by the District for such purpose.

The District's Wastewater System Revenue/Refunding Bonds, Series 2010A (the "Series 2010A Bonds") were issued on October 20, 2010 in the aggregate principal amount of \$58,095,000 to refund certain Bonds previously issued by the District and to prepay certain then outstanding State loans of the District. As of May 1, 2017, \$44,295,000 aggregate principal amount of the Series 2010A Bonds remained outstanding. A portion of the proceeds of the Series 2017A Bonds will be used to refund the \$34,100,000 outstanding aggregate principal amount of Series 2010A Bonds maturing on and after June 1, 2021. Series 2010A Bonds in the principal amount of \$2,390,000 matured on June 1, 2017, and were paid on such maturity date from funds held by the District for such purpose. Following such payment and upon the issuance of the Series 2017A Bonds and the defeasance of the Series 2010A Bonds to be refunded thereby, \$7,805,000 aggregate principal amount of the Series 2010A Bonds will remain outstanding.

The following table details the Series, maturity dates and principal amounts of the Wastewater System Revenue Bonds to be refunded with the proceeds of the Series 2017A Bonds.

### Refunded Bonds

Series and Maturity of Bonds	Issue Date	CUSIP (Base No.: 271012)	Outstanding Principal Amount	Interest Rate	Principal Amount to be Refunded	Redemption Date	Redemption Price
<b>Wastewater System Subordinated Revenue Refunding Bonds, Series 2007B</b>							
	06/06/07						
June 1, 2018		BK1	\$ 3,130,000	5.00%	\$ 3,130,000	July 3, 2017	100%
June 1, 2019		BL9	3,260,000	5.00	3,260,000	July 3, 2017	100
June 1, 2020		BM7	2,235,000	5.00	2,235,000	July 3, 2017	100
June 1, 2021		BN5	2,320,000	5.00	2,320,000	July 3, 2017	100
June 1, 2022		BP0	2,350,000	5.00	2,350,000	July 3, 2017	100
June 1, 2023		BQ8	2,465,000	5.00	2,465,000	July 3, 2017	100
June 1, 2024		BR6	2,585,000	5.00	2,585,000	July 3, 2017	100
June 1, 2026 <sup>(1)</sup>		BS4	5,570,000	5.00	5,570,000	July 3, 2017	100
Total			\$23,915,000		\$23,915,000		
<b>Wastewater System Revenue/Refunding Bonds, Series 2010A</b>							
	10/20/10						
June 1, 2021		DA1	\$ 2,750,000	5.00%	\$ 2,750,000	June 1, 2020	100%
June 1, 2022		DB9	2,885,000	5.00	2,885,000	June 1, 2020	100
June 1, 2023		DK9	3,000,000	4.00	3,000,000	June 1, 2020	100
June 1, 2023		DC7	50,000	3.00	50,000	June 1, 2020	100
June 1, 2024		DD5	3,175,000	5.00	3,175,000	June 1, 2020	100
June 1, 2025		DE3	3,325,000	5.00	3,325,000	June 1, 2020	100
June 1, 2026		DF0	3,510,000	5.00	3,510,000	June 1, 2020	100
June 1, 2027		DG8	5,085,000	5.00	5,085,000	June 1, 2020	100
June 1, 2028		DH6	9,900,000	5.00	9,900,000	June 1, 2020	100
June 1, 2029		DJ2	420,000	4.00	420,000	June 1, 2020	100
Total			\$34,100,000		\$34,100,000		

<sup>(1)</sup> Term Bonds.

The refunding of the Refunded Bonds will be effected by depositing a portion of the proceeds of the Series 2017A Bonds into an escrow fund for the related Series of Refunded Bonds (the “2007B Escrow Fund” and the “2010A Escrow Fund,” respectively, and collectively, the “Escrow Funds”) created and established under the terms of the escrow agreement for the related Series of Refunded Bonds, each dated as of June 1, 2017 (the “2007B Escrow Agreement” and the “2010A Escrow Agreement,” and collectively, the “Escrow Agreements”), each by and between the District and The Bank of New York Mellon Trust Company, N.A., as escrow agent (the “Escrow Agent”). The proceeds and other available moneys deposited into the 2007B Escrow Fund will be held by the Escrow Agent in cash or will be invested in direct noncallable obligations of, or unconditionally guaranteed by, the United States of America (“Federal Securities”), which Federal Securities, if any, will bear interest at such rates and will be scheduled to mature at such times and in such amounts so that, when paid in accordance with their terms, such amounts, together with any amounts held as cash in the 2007B Escrow Fund, will be in an amount sufficient to pay the redemption price (*i.e.*, 100% of the principal amount) of the Refunded 2007B Bonds to be redeemed on July 3, 2017, plus accrued interest thereon to such redemption date. The proceeds and other available moneys deposited into the 2010A Escrow Fund will be held by the Escrow Agent in cash or will be invested in Federal Securities, which Federal Securities, if any, will bear interest

at such rates and will be scheduled to mature at such times and in such amounts so that, when paid in accordance with their terms, such amounts, together with any amounts held as cash in the 2010A Escrow Fund, will be sufficient to pay (a) interest on the Refunded 2010A Bonds as the same shall become due on and before June 1, 2020, the redemption date for such Refunded 2010A Bonds, and (b) the redemption price (*i.e.*, 100% of the principal amount) of the Refunded 2010A Bonds to be redeemed on such redemption date.

Raymond James & Associates, Inc. (“Raymond James”) acted as registered investment advisor to the District in its capacity as bidding agent in conducting a competitive bid procurement process for the purchase of open market securities to be held in the Escrow Funds. Raymond James will receive compensation for bidding agent services contingent on the sale and delivery of the Series 2017A Bonds.

Grant Thornton LLP, Minneapolis, Minnesota, independent certified public accountants, will verify, from the information provided to them, the mathematical accuracy as of the date of delivery of the Series 2017A Bonds of computations relating to (i) the adequacy of the maturing principal amounts of the Federal Securities to be deposited to the 2007B Escrow Fund under the 2007B Escrow Agreement and interest to be earned thereon, together with amounts held as cash in the 2007B Escrow Fund, to pay the redemption price of the Refunded 2007B Bonds to be redeemed on the redemption date therefor, plus accrued interest thereon, and (ii) the adequacy of the maturing principal amounts of the Federal Securities to be deposited to the 2010A Escrow Fund under the 2010A Escrow Agreement and interest to be earned thereon, together with amounts held as cash in the 2010A Escrow Fund, to pay interest on the Refunded 2010A Bonds as the same shall become due on and before the redemption date for such Refunded 2010A Bonds and the redemption price of the Refunded 2010A Bonds to be redeemed on such redemption date. See “VERIFICATION OF MATHEMATICAL COMPUTATIONS.”

Upon the foregoing deposits and investment and compliance with or provision for compliance with certain notice requirements set forth in the Indenture, the liability of the District with respect to the Refunded Bonds will cease and the Refunded Bonds will no longer be Outstanding under the Indenture except that the Owners of the Refunded Bonds will be entitled to payment thereof solely from the amounts on deposit in the respective Escrow Fund held by the Escrow Agent therefor.

## **ESTIMATED SOURCES AND USES OF FUNDS**

The estimated sources and uses of funds with respect to the Series 2017A Bonds are as follows:

### ***Sources***

Principal Amount.....	\$69,420,000
Original Issue Premium .....	13,232,544
Total.....	<u>\$82,652,544</u>

### ***Uses***

Series 2017A Wastewater System Fund <sup>(1)</sup> .....	\$20,500,000
2007B Escrow Fund.....	24,013,967
2010A Escrow Fund .....	37,546,150
Initial Purchaser’s Discount.....	159,825
Costs of Issuance <sup>(2)</sup> .....	432,602
Total.....	<u>\$82,652,544</u>

<sup>(1)</sup> Includes amounts to be reimbursed to the District for prior expenditures.

<sup>(2)</sup> Includes legal, financing and consulting fees, rating agency fees, printing costs and other miscellaneous expenses.

## THE SERIES 2017A BONDS

### General Description

The Series 2017A Bonds will be issued in the aggregate principal amount, will bear interest at the respective rates and will mature in the respective years and amounts, all as set forth on the inside cover page of this Official Statement. The Series 2017A Bonds will be issued in denominations of \$5,000 principal amount or any integral multiple thereof. The Series 2017A Bonds will be dated, and shall bear interest from, their date of delivery. Interest on the Series 2017A Bonds is payable on each June 1 and December 1, commencing on December 1, 2017, and will be computed on the basis of a 360-day year of twelve 30-day months. The Series 2017A Bonds will be issued as fully registered bonds in book-entry form only and when delivered will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”), which will act as securities depository for the Series 2017A Bonds. So long as DTC, or its nominee, Cede & Co., is the registered owner of the Series 2017A Bonds, all payments of principal or redemption price of, and interest on, the Series 2017A Bonds will be made directly to DTC, which is obligated in turn to remit such principal or redemption price and interest to its DTC participants for subsequent disbursement to the beneficial owners of the Series 2017A Bonds. See APPENDIX E – “DTC AND THE BOOK-ENTRY ONLY SYSTEM.”

### Redemption

**Optional Redemption.** The Series 2017A Bonds maturing on or before June 1, 2027 are not subject to optional redemption prior to maturity. The Series 2017A Bonds maturing on and after June 1, 2028 are subject to redemption prior to their respective stated maturities, at the option of the District, from any source of available funds, as a whole or in part on any date (by such maturities as may be specified by the District and by lot within a maturity), on or after June 1, 2027, at a redemption price equal to the principal amount of Series 2017A Bonds called for redemption, plus accrued interest to the date fixed for redemption, without premium.

**Mandatory Redemption.** The Series 2017A Bonds maturing on June 1, 2045 are subject to redemption prior to their stated maturity, in part, by lot, from Mandatory Sinking Account Payments as specified below at the principal amount of each Series 2017A Bond so redeemed plus accrued interest thereon to but not including the date fixed for redemption, without premium.

#### Term Series 2017A Bonds due June 1, 2045

<i>Mandatory Sinking Account Payment Dates (June 1)</i>	<i>Mandatory Sinking Account Payments</i>
2041	\$ 940,000
2042	975,000
2043	1,015,000
2044	1,055,000
2045 <sup>†</sup>	1,100,000

<sup>†</sup> Final Maturity.

Upon an optional redemption of a portion of any term Series 2017A Bond, the District shall provide the Trustee with a revised schedule of the foregoing Mandatory Sinking Account Payments which shall provide for a reduction in the amount of one or more of the Mandatory Sinking Account Payments coming due on such term Series 2017A Bond after such redemption as specified by the District in such schedule to reflect such redeemed portion.

***Notice of Redemption.*** Notice of redemption of the Series 2017A Bonds shall be given by the Trustee, not less than 20 nor more than 60 days prior to the redemption date, to DTC by electronic means of communication or by first-class mail or, if the book-entry system as described in Appendix E has been discontinued, to the respective Owners of any Series 2017A Bonds designated for redemption at their addresses appearing on the bond registration books of the Trustee by first-class mail, and to EMMA by electronic means of communication, or to such other securities depositories or information services as the District may designate in a Request of the District delivered to the Trustee. Such notice of redemption will state, among other things, the date of issue of the Series 2017A Bonds to which such notice relates, the redemption date, the Redemption Price and in the case of Series 2017A Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed, and shall be given in the form and otherwise in accordance with the terms of the Indenture. Failure by any Owner to receive notice or any defect in any such notice shall not affect the sufficiency of the proceedings for redemption.

In the event of an optional redemption of Series 2017A Bonds, if the District shall not have deposited or otherwise made available to the Trustee the money required for the payment of the redemption price of the Series 2017A Bonds to be redeemed at the time of the mailing of notice of redemption, such notice of redemption shall state that the redemption is expressly conditioned upon the timely deposit of sufficient funds therefor with the Trustee.

***Selection of Bonds for Redemption.*** Whenever provision is made in the Indenture for the redemption of less than all of the Series 2017A Bonds, the maturities of such Series 2017A Bonds to be redeemed shall be specified by the District. In the case of partial redemption of less than all of the Series 2017A Bonds of any maturity, the Trustee will select the Series 2017A Bonds of such maturity to be redeemed from all Series 2017A Bonds of the respective maturity not previously called for redemption, in authorized denominations, by lot, in any manner which the Trustee in its sole discretion deems appropriate and fair.

***Effect of Redemption.*** If notice of redemption is given as provided in the Indenture, and moneys for payment of the Redemption Price of, together with interest accrued to the redemption date on, the Series 2017A Bonds (or portions thereof) so called for redemption is held by the Trustee, then on the redemption date designated in such notice, the Series 2017A Bonds (or portions thereof) so called for redemption will become due and payable at the Redemption Price specified in the notice of redemption, together with interest accrued thereon to the date fixed for redemption, interest on such Series 2017A Bonds so called for redemption will cease to accrue, the Series 2017A Bonds (or portions thereof) will cease to be entitled to any benefit or security under the Indenture and the owners of the Series 2017A Bonds (or portions thereof) will have no rights in respect thereof except to receive payment of the Redemption Price plus accrued interest.

## **SECURITY FOR THE SERIES 2017A BONDS**

### **General**

***Authority for Issuance.*** The Series 2017A Bonds are authorized for issuance pursuant to the Municipal Utility District Act and laws of the State amendatory thereof or supplemental thereto, including the Revenue Bond Law of 1941, as made applicable by Article 6a of Chapter 6 of Division 6 of the

Municipal Utility District Act, and with respect to any portion of the Series 2017A Bonds issued to refund outstanding bonds of the District, Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State (collectively, the “Act”), resolutions adopted by the District and the Indenture.

***Amendments to the Indenture.*** The Thirteenth Supplemental Indenture includes a number of amendments to the Indenture which amendments are to be effective upon the first date upon which all of the Outstanding Wastewater System Revenue Bonds issued prior to the date of the Thirteenth Supplemental Indenture have been paid and discharged in accordance with their terms. **Such amendments contained in the Thirteenth Supplemental Indenture will become effective upon the delivery of the 2017A Bonds and the defeasance of the Refunded 2007B Bonds (see “PLAN OF FINANCE – Refunding of the Refunded Bonds”).** The terms of the Indenture as described herein and in APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE” reflect the effectiveness of such amendments and describe terms of the Indenture as otherwise amended and as amended by the Thirteenth Supplemental Indenture.

### **Pledge of Subordinated Wastewater Revenues**

Pursuant to the Indenture, the District has irrevocably pledged to the payment of the principal or redemption price of and interest on the Wastewater System Revenue Bonds, including the Series 2017A Bonds and any Parity Debt, all Subordinated Wastewater Revenues (as hereinafter defined) and all amounts held by the Trustee under the Indenture (except for amounts held in the Rebate Fund) subject only to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein.

“Subordinated Wastewater Revenues” is generally defined in the Indenture to mean, for any fiscal period, the sum of (a) all charges received for, and all other income and receipts derived by the District from, the operation of the Wastewater System, or arising from the Wastewater System, together with income from the investment of any moneys in any fund or account established under the Senior Wastewater Bond Resolution relating to the District’s Senior Wastewater Bonds or the Indenture; provided, however, there shall be excluded therefrom any amounts reimbursed to the District by the United States of America pursuant to Section 54AA of the Code or any future similar program (collectively, “Wastewater Revenues”) for such fiscal period, plus (b) the amounts, if any, withdrawn by the District from the Rate Stabilization Fund established under the Senior Wastewater Bond Resolution for treatment as Wastewater Revenues for such fiscal period, less the sum of (c) all Wastewater Operation and Maintenance Costs (as hereinafter defined) for such fiscal period, (d) the amounts, if any, withdrawn by the District from Wastewater Revenues for such fiscal period for deposit in the Rate Stabilization Fund, and (e) all amounts required to be paid under the Senior Wastewater Bond Resolution for principal, interest, reserve fund and any other debt service requirements on the Senior Wastewater Bonds as the same become due and payable. **There are no Senior Wastewater Bonds currently outstanding and the District has covenanted pursuant to the Twelfth Supplemental Indenture that it will not issue any Senior Wastewater Bonds in the future.** See “– Outstanding Wastewater System Revenue Obligations – *No Senior Wastewater Bonds*” below.

The District may deposit into, or withdraw amounts from time to time held in, the Rate Stabilization Fund within 120 days after the end of the applicable Fiscal Year. Amounts deposited into the Rate Stabilization Fund shall be deducted from Wastewater Revenues for such Fiscal Year. Amounts withdrawn from the Rate Stabilization Fund shall be included in Wastewater Revenues for such Fiscal Year and may be applied for any purposes for which Wastewater Revenues generally are available. All interest and earnings upon deposits in the Rate Stabilization Fund will not be held therein, but will be treated and accounted for as Wastewater Revenues. The amount on deposit in the Rate Stabilization Fund as of May 1, 2017 was \$24,090,000.

“Wastewater Operation and Maintenance Costs” is generally defined in the Indenture to mean the reasonable and necessary costs of maintaining and operating the Wastewater System, calculated on sound accounting principles, including (among other things) the reasonable expenses of management, repair and other expenses necessary to maintain and preserve the Wastewater System in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes and other similar costs, but excluding in all cases depreciation and obsolescence charges or reserves therefor and amortization of intangibles or other bookkeeping entries of a similar nature, and excluding all costs paid from the proceeds of taxes received by the District.

“Parity Debt” means any indebtedness, installment sale obligation, lease obligation or other obligation of the District for borrowed money or interest rate swap agreement having an equal lien and charge upon the Subordinated Wastewater Revenues and therefore payable on a parity with the Wastewater System Revenue Bonds (whether or not any Wastewater System Revenue Bonds are Outstanding).

The Series 2017A Bonds are not payable from or secured by the revenues of the Water System of the District.

**The Series 2017A Bonds are special obligations of the District, payable solely from and secured by a pledge of Subordinated Wastewater Revenues. Neither the full faith and credit nor the taxing power of the District is pledged to the payment of the Series 2017A Bonds or the interest thereon.**

#### **Allocation of Subordinated Wastewater Revenues Under the Indenture**

In accordance with the Indenture, all Subordinated Wastewater Revenues, when and as received by the District, shall be deposited into a fund to be established and maintained by the District designated as the “Revenue Fund.” So long as any Wastewater System Revenue Bonds are Outstanding, the District will transfer the moneys in the Revenue Fund into the following respective funds (established, maintained and held by the Trustee in trust for the benefit of the Owners of the Wastewater System Revenue Bonds) in the following order of priority; provided, that on a parity with such deposits the Trustee may set aside or transfer amounts with respect to outstanding Parity Debt as provided in the proceedings for such Parity Debt (which deposits shall be proportionate in the event such amounts are insufficient to provide for all deposits required as of any date to be made with respect to the Wastewater System Revenue Bonds and such Parity Debt):

**Interest Fund.** The District will transfer to the Trustee to be set aside in the Interest Fund on or before the Business Day prior to each interest payment date an amount equal to the interest becoming due and payable on the Outstanding Wastewater System Revenue Bonds (excluding any interest for which there are moneys on deposit in the Interest Fund from the proceeds of any Series of Wastewater System Revenue Bonds or other source to pay such interest).

***Principal Fund; Sinking Accounts.*** The District shall transfer to the Trustee to be set aside in the Principal Fund on or before the Business Day prior to each principal or sinking account payment date an amount equal to the amount of Bond Obligation (as defined in the Indenture) plus the Mandatory Sinking Account Payments becoming due and payable on such date. All Mandatory Sinking Account Payments shall be made without priority of any payment into any one such sinking account over any other such payment.

***Bond Reserve Funds.*** Upon the occurrence of any deficiency in any bond reserve fund established pursuant to the Indenture for any Series of Wastewater System Revenue Bonds, the District shall transfer to the Trustee and the Trustee shall set aside in such bond reserve fund an amount equal to the aggregate amount of each unreplenished prior withdrawal from such bond reserve fund until there is on deposit in such bond reserve fund an amount equal to the respective reserve requirement for such bond reserve fund. There is no bond reserve fund being established in connection with the Series 2017A Bonds. See “– No Bond Reserve Fund for Series 2017A Bonds” below.

The requirements of each such fund (including the making up of any deficiencies in any such fund resulting from a lack of Subordinated Wastewater Revenues sufficient to make any earlier required deposit) at the time of deposit is to be satisfied before any deposit is made to any other fund subsequent in priority. The Indenture provides that any Subordinated Wastewater Revenues remaining in the Revenue Fund after the foregoing transfers, except as otherwise provided in a Supplemental Indenture, shall be held free and clear of the Indenture by the District. The District may use and apply such Subordinated Wastewater Revenues for any lawful purpose of the District, including the redemption of Wastewater System Revenue Bonds upon the terms and conditions set forth in a Supplemental Indenture relating to such Wastewater System Revenue Bonds and the purchase of Wastewater System Revenue Bonds as and when and at such prices as it may determine.

Under the Indenture the District may enter into an interest rate swap agreement corresponding to the interest rate or rates payable on a Series of Wastewater System Revenue Bonds or any portion thereof and the amounts received by the District or the Trustee, if any, pursuant to such an interest rate swap agreement may be applied to the deposits required under the Indenture. If the District so designates, amounts payable under the interest rate swap agreement shall be secured by Subordinated Wastewater Revenues and other assets pledged under the Indenture to the Wastewater System Revenue Bonds on a parity basis therewith.

For further information regarding the allocation of Subordinated Wastewater Revenues with respect to the Wastewater System Revenue Bonds, see APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Allocation of Subordinated Wastewater Revenues.”

#### **No Bond Reserve Fund for Series 2017A Bonds**

There is no bond reserve fund being established in connection with the Series 2017A Bonds and amounts on deposit in any bond reserve fund for any other Series of Wastewater System Revenue Bonds are not available for the payment of, and do not in any manner secure, the Series 2017A Bonds.

#### **Rate Covenant**

The District has covenanted under the Indenture that it will, at all times while any of the Wastewater System Revenue Bonds remain Outstanding, fix, prescribe and collect rates, fees and charges in connection with the services and facilities furnished by the Wastewater System so as to yield Wastewater Revenues in each Fiscal Year sufficient so that the Subordinated Wastewater Revenues for such year shall be at least equal to 1.1 times the amount of Debt Service on all Wastewater System

Revenue Bonds and Parity Debt for such Fiscal Year. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Certain Definitions” for the definition of Debt Service under the Indenture.

### **Outstanding Wastewater System Revenue Obligations**

***No Senior Wastewater Bonds.*** Pursuant to Resolution No. 30051 adopted by the Board of Directors of the District on January 26, 1982 (as amended and supplemented, the “Senior Wastewater Bond Resolution”), the District authorized the issuance, from time to time, of bonds of the District designated as “East Bay Municipal Utility District Wastewater Treatment System Revenue Bonds” (the “Senior Wastewater Bonds”) and secured by a pledge of, and first lien on, the Net Revenues (as defined in the Senior Wastewater Bond Resolution) of the District’s Wastewater System, generally being all of the Wastewater Revenues (adjusted for deposits to and withdrawals from the Rate Stabilization Fund) after payment of Wastewater Operation and Maintenance Costs thereof, all on the terms and conditions set forth in the Senior Wastewater Bond Resolution. At the time of the initial execution and delivery of the Indenture in 1990, the Indenture did not preclude the District from issuing additional Senior Wastewater Bonds pursuant to the Senior Wastewater Bond Resolution. The District last issued Senior Wastewater Bonds in 1986 and all outstanding Senior Wastewater Bonds were retired in 1997. **There are currently no Senior Wastewater Bonds outstanding. Pursuant to the Twelfth Supplemental Indenture, the District has covenanted and agreed that it will not issue any Senior Wastewater Bonds in the future pursuant to the Senior Wastewater Bond Resolution.**

***Outstanding Wastewater System Revenue Bonds and Parity Debt.*** As of May 1, 2017, the District had Outstanding \$388,530,000 aggregate principal amount of Wastewater System Revenue Bonds (collectively, the “Outstanding Wastewater System Revenue Bonds”) issued under and pursuant to the Indenture. All of the District’s Outstanding Wastewater System Revenue Bonds are fixed rate bonds. See APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Outstanding Debt.”

The District’s \$150,000,000 Outstanding Wastewater System Revenue Bonds, Series 2010B were issued as “Build America Bonds” that are “qualified bonds” under the provisions of the American Recovery and Reinvestment Act of 2009. For the purpose of calculating Debt Service, Annual Debt Service and Maximum Annual Debt Service under the Indenture (as amended by the Thirteenth Supplemental Indenture), to the extent interest on such Build America Bonds is reasonably anticipated to be reimbursed to the District by the United States of America pursuant to Section 54AA of the Code, or any future similar program (such interest subsidy payments being referred to herein as “BABs Interest Subsidy Payments”), then in making such calculations, interest payments with respect to the Build America Bonds shall be reduced by the amount of such interest reasonably anticipated to be paid or reimbursed by the United States of America. Pursuant to Federal sequestration legislation passed by Congress in 2011 and 2013, Federal subsidy payments for direct-pay bonds, including Build America Bonds, have been reduced (by formula) from the original funding subsidy level of 35% of interest costs on direct-pay bonds, including Build America Bonds. The sequestration reduction rate of the Federal subsidy payment for Build America Bonds is 6.9% for the Federal government’s fiscal year beginning October 1, 2016, and this means that BABs Interest Subsidy Payments sought by the District for its Build America Bonds will be reduced by this percentage. This reduction will increase the District’s net interest cost. The percentage reduction is re-determined for each Federal fiscal year. At present, pursuant to Federal legislation, sequestration will continue through fiscal year 2023. The District can give no assurance regarding the level of subsidy payments or changes in the sequestration rate, if any, in the future, or whether Congress will adopt legislation in the future that will further reduce subsidy payments for direct-pay bonds, including Build America Bonds. Under the Indenture, the District is obligated to

make all interest payments on the Wastewater System Revenue Bonds without regard to the receipt of any federal BABs Interest Subsidy Payments by the District.

The Outstanding Wastewater System Revenue Bonds, together with any additional Wastewater System Revenue Bonds issued under the Indenture (including the Series 2017A Bonds), and any Parity Debt (which may include payment obligations under interest rate swap agreements) heretofore or hereafter issued or incurred in accordance with the Indenture, are on a parity as to the pledge of and lien on Subordinated Wastewater Revenues.

***Parity State Loans.*** The District participates from time-to-time in the Clean Water State Revolving Fund loan program administered by the State Water Resources Control Board (the “SWRCB”), which was established to provide below-market rate financing for qualified water quality infrastructure projects in the State. Under this program, the District has from time-to-time entered into loan contracts with the SWRCB (the “State Loans”) payable from the Wastewater Revenues. The District currently has no outstanding State Loans payable from Wastewater Revenues.

State Loans entered into under the SWRCB low interest rate loan program generally provide that such State Loans shall be either senior to or on a parity with all future debt of the recipient thereof. Any future State Loans received by the District would likely constitute Parity Debt under the Indenture.

***Subordinate Commercial Paper.*** The District maintains two commercial paper note programs. Under the District’s extendable municipal commercial paper program, commercial paper may be issued at prevailing interest rates for periods of not more than 120 days from the date of issuance with the option by the District to extend the maturity for another 150 days. The extendable municipal commercial paper program is not supported by any liquidity or revolving credit agreement. As of May 1, 2017, the District had outstanding \$15,000,000 aggregate principal amount of tax-exempt Extendable Municipal Commercial Paper Notes (Wastewater Series) issued for the benefit of the Wastewater System under the District’s extendable municipal commercial paper program. Under the District’s traditional commercial paper program, commercial paper notes may be issued at prevailing interest rates for periods of not more than 270 days from the date of issuance. In connection with its traditional commercial paper program, the District has covenanted to procure and maintain in effect for any series or subseries of commercial paper notes issued thereunder one or more liquidity facilities enabling it to borrow an aggregate amount at least equal to the principal amount of such series or subseries of commercial paper notes. As of May 1, 2017, the District had no Commercial Paper Notes (Wastewater Series) issued for the benefit of the Wastewater System under the District’s traditional commercial paper program. Commercial paper notes issued for the benefit of the Wastewater System under either such program (and the District’s repayment obligation for amounts borrowed, if any, under any applicable liquidity facility therefor), are payable from and secured by a pledge of Wastewater Revenues on a basis subordinate to the Wastewater System Revenue Bonds and Parity Debt. See APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Outstanding Debt” for additional information regarding the District’s authorized commercial paper note programs.

### **Issuance of Additional Wastewater System Revenue Bonds and Parity Debt; Junior and Subordinate Obligations**

The Indenture provides conditions under which additional Series of Wastewater System Revenue Bonds or other Parity Debt payable from Subordinated Wastewater Revenues may be issued on a parity with the Outstanding Wastewater System Revenue Bonds. Among other conditions, the Indenture requires that the District shall have placed on file with the Trustee a certificate of the District certifying that the sum of: (1) the Subordinated Wastewater Revenues for any period of 12 consecutive months during the 18 months immediately preceding the date on which such additional Wastewater System

Revenue Bonds or Parity Debt will become Outstanding; plus (2) 90% of the amount by which the District projects Subordinated Wastewater Revenues for such period of 12 months would have been increased had increases in rates, fees and charges during such period of 12 months been in effect throughout such period of 12 months; plus (3) 75% of the amount by which the District projects Subordinated Wastewater Revenues will increase during the period of 12 months commencing on the date of issuance of such additional Series of Wastewater System Revenue Bonds due to improvements to the Wastewater System under construction (financed from any source) or to be financed with the proceeds of such additional Series of Wastewater System Revenue Bonds, shall have been at least equal to 1.1 times the amount of Maximum Annual Debt Service on all Wastewater System Revenue Bonds and Parity Debt then Outstanding and the additional Wastewater System Revenue Bonds or Parity Debt then proposed to be issued. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Certain Definitions” for the definition of Maximum Annual Debt Service and Debt Service under the Indenture.

Refunding Wastewater System Revenue Bonds may be authorized and issued by the District without compliance with the provisions described above, subject to the terms and conditions of the Indenture, including the condition that Maximum Annual Debt Service on all Wastewater System Revenue Bonds and Parity Debt outstanding following the issuance of such refunding Wastewater System Revenue Bonds is less than or equal to Maximum Annual Debt Service on all Wastewater System Revenue Bonds and Parity Debt outstanding prior to the issuance of such refunding Wastewater System Revenue Bonds. See APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Refunding Bonds.”

The District has in the past, and may from time-to-time in the future, enter into interest rate swap agreements corresponding to the interest rate or rates payable on a Series of Bonds or any portion thereof. Any such interest rate swap agreements may contain such security and payment provisions, including collateral posting obligations and early termination provisions, as determined by the District and subject to any conditions contained in the Indenture. Pursuant to the Indenture, if the District so designates, amounts payable under an interest rate swap agreement may be secured by Subordinated Wastewater Revenues and other assets pledged under the Indenture on a parity basis with the Wastewater System Revenue Bonds and other Parity Debt.

Pursuant to the Indenture, the District may incur obligations which are junior and subordinate to the payment of the principal, redemption price, interest and reserve fund requirements for the Wastewater System Revenue Bonds and all Parity Debt and which subordinated obligations are payable as to principal, redemption price, interest and reserve fund requirements, if any, only out of Subordinated Wastewater Revenues after the prior payment of all amounts then required to be paid under the Indenture from Subordinated Wastewater Revenues for principal, redemption price, interest and reserve fund requirements for the Wastewater System Revenue Bonds and all Parity Debt, as the same become due and payable and at the times and in the manner as required in the Indenture or the instrument authorizing such Parity Debt, as applicable.

### **Investment of Moneys in Funds and Accounts Under the Indenture**

All moneys held in any of the funds and accounts held by the Trustee and established pursuant to the Indenture shall be invested, as directed by the District, solely in Investment Securities (see APPENDIX C – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Certain Definitions” for the definition of Investment Securities under the Indenture). If and to the extent the Trustee does not receive investment instructions from the District with respect to the moneys in such funds and accounts, such moneys shall be invested in a cash sweep or similar account arrangement of or available to the Trustee described in clause (xi) of the definition of Investment Securities.

Unless otherwise provided in a Supplemental Indenture, all interest, profits and other income received from the investment of moneys in any fund or account other than the Rebate Fund shall be transferred to the Revenue Fund when received; provided, however, that an amount of interest received with respect to any Investment Security equal to the amount of accrued interest, if any, paid as part of the purchase price of such Investment Security shall be credited to the fund or account from which such accrued interest was paid.

### **Limitations on Remedies**

The ability of the District to comply with its covenants under the Indenture and to generate Wastewater Revenues sufficient to pay the principal of and interest on the Series 2017A Bonds may be adversely affected by actions and events outside of the control of the District. Furthermore, any remedies available to the owners of the Series 2017A Bonds upon the occurrence of an event of default under the Indenture are in many respects dependent upon judicial actions which are often subject to discretion and delay and could prove both expensive and time consuming to obtain. In addition, enforceability of the rights and remedies of the owners of the Series 2017A Bonds, and the obligations incurred by the District under the Series 2017A Bonds and the Indenture, may become subject to the following: the federal Bankruptcy Code and applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws relating to or affecting the enforcement of creditor's rights generally, now or hereafter in effect; equity principles which may limit the specific enforcement under State law of certain remedies; the exercise by the United States of America of the powers delegated to it by the Constitution; and the reasonable and necessary exercise, in certain exceptional situations, of the police powers inherent in the sovereignty of the State and its governmental bodies in the interest of serving a significant and legitimate public purpose. Bankruptcy proceedings, or the exercise of powers by the federal or State government, if initiated, could subject the owners of the Series 2017A Bonds to judicial discretion and interpretation of their rights in bankruptcy or otherwise, and consequently may entail risks of delay, limitation, or modification of their rights.

## **CONSTITUTIONAL AND STATUTORY LIMITATIONS ON TAXES AND APPROPRIATIONS**

### **Tax Limitations – Proposition 13**

Article XIII A of the State Constitution, known as Proposition 13, was approved by the voters in June 1978. Section 1(a) of Article XIII A limits the maximum ad valorem tax on real property to 1% of “full cash value,” and provides that such tax shall be collected by the counties and apportioned according to State statutes. Section 1(b) of Article XIII A provides that the 1% limitation does not apply to *ad valorem* taxes levied to pay interest or redemption charges on (1) indebtedness approved by the voters prior to July 1, 1978, and (2) any bonded indebtedness for the acquisition or improvement of real property approved on or after July 1, 1978, by two-thirds of the votes cast by the voters voting on the proposition.

Section 2 of Article XIII A defines “full cash value” to mean the county assessor’s valuation of real property as shown on the 1975-76 Fiscal Year tax bill, or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred. The full cash value may be adjusted annually to reflect inflation at a rate not to exceed 2% per year, or to reflect a reduction in the consumer price index or comparable data for the taxing jurisdiction, or may be reduced in the event of declining property value caused by substantial damage, destruction or other factors. Legislation enacted by the State Legislature to implement Article XIII A provides that, notwithstanding any other law, local agencies may not levy any ad valorem property tax except to pay debt service on indebtedness approved by the voters as described above. Such legislation further provides that each county will levy the maximum tax permitted by Article XIII A, which is \$1.00 per \$100 of assessed market value. The

legislation further establishes the method for allocating the taxes collected by each county among the taxing agencies in the county. Special districts, such as the District, receive an allocation that is based primarily upon their tax levies in certain years prior to the amendment's effective date relative to the tax levies of other congruent agencies. The District receives approximately 1.25% of the non-debt service property taxes collected within its jurisdiction from Alameda and Contra Costa counties. See also APPENDIX A – "THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Property Tax Revenues."

Since its adoption, Article XIII A has been amended a number of times. These amendments have created a number of exceptions to the requirement that property be reassessed when purchased, newly constructed or a change in ownership has occurred. These exceptions include certain transfers of real property between family members, certain purchases of replacement dwellings for persons over age 55 and by property owners whose original property has been destroyed in a declared disaster, and certain improvements to accommodate disabled persons and for seismic upgrades to property. These amendments have resulted in marginal reductions in the property tax revenues of the District.

Increases of assessed valuation resulting from reappraisals of property due to new construction, change in ownership or from the 2% annual adjustment are allocated among the various jurisdictions in the "taxing area" based upon their respective "situation." Any such allocation made to a local agency continues as part of its allocation in future years.

The effect of Article XIII A on the District's finances has been to restrict *ad valorem* tax revenues for general purposes to the statutory allocation of the 1% levy while leaving intact the power to levy *ad valorem* taxes in whatever rate or amount may be required to pay debt service on its outstanding general obligation bonds and unissued bonds authorized prior to July 1, 1978. Both the California State Supreme Court and the United States Supreme Court have upheld the validity of Article XIII A.

For a description of the property tax collection procedure and certain statistical information concerning tax collections and delinquencies, see APPENDIX A – "THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Property Tax Revenues."

## **Spending Limitations**

At the statewide special election of November 6, 1979, the voters approved an initiative entitled "Limitation of Government Appropriations" which added Article XIII B to the California Constitution. Under Article XIII B, State and local governmental entities have an annual "appropriations limit" which limits the ability to spend certain moneys which are called "appropriations subject to limitation" (consisting of tax revenues, state subventions and certain other funds) in an amount higher than the "appropriations." Article XIII B does not affect the appropriation of moneys which are excluded from the definition of "appropriations subject to limitation." Among the exclusions is an "appropriation of any special district which existed on January 1, 1978, and which did not as of the 1977-78 Fiscal Year levy an *ad valorem* tax on property in excess of 12.5 cents per \$100 of assessed value." In the opinion of the District's General Counsel, the appropriations of the District are excluded from the limitations of Article XIII B under this clause.

## **Proposition 62**

A statutory initiative ("Proposition 62") was adopted by the voters voting in the State at the November 4, 1986 General Election which (1) requires that any tax for general governmental purposes imposed by local governmental entities be approved by resolution or ordinance adopted by two-thirds

vote of the governmental agency's legislative body and by a majority of the electorate of the governmental entity, (2) requires that any special tax (defined as taxes levied for other than general governmental purposes) imposed by a local governmental entity be approved by a two-thirds vote of the voters within that jurisdiction, (3) restricts the use of revenues from a special tax to the purposes or for the service for which the special tax was imposed, (4) prohibits the imposition of ad valorem taxes on real property by local governmental entities except as permitted by Article XIII A, (5) prohibits the imposition of transaction taxes and sales taxes on the sale of real property by local governmental entities and (6) requires that any tax imposed by a local governmental entity on or after March 1, 1985 be ratified by a majority vote of the electorate within two years of the adoption of the initiative or be terminated by November 15, 1988.

### **Proposition 218**

On November 5, 1996, the voters of the State approved Proposition 218, the so-called "Right to Vote on Taxes Act." Proposition 218 added Articles XIII C and XIII D to the State Constitution, which contain a number of provisions affecting the ability of local governments to levy and collect both existing and future taxes, assessments, fees and charges.

**Article XIII D.** Article XIII D established procedural requirements for imposition of assessments, which are defined as any charge on real property for a special benefit conferred upon the real property. Standby charges are classified as assessments. Procedural requirements include the conducting of a public hearing and an election by mailed ballot, with notice to the record owner of each parcel subject to the assessment. The assessment may not be imposed if a majority of the ballots returned oppose the assessment, with each ballot weighted according to the proportional financial obligation of the affected parcel. The District does not currently impose standby charges or assessments for its Wastewater System.

Article XIII D conditions the imposition or increase of any "fee" or "charge" upon there being no written majority protest after a required public hearing and, for fees and charges other than for sewer, water or refuse collection services, voter approval. Article XIII D defines "fee" or "charge" to mean levies (other than *ad valorem* or special taxes or assessments) imposed by a local government upon a parcel or upon a person as an incident of the ownership or tenancy of real property, including a user fee or charge for a "property-related service." One of the requirements of Article XIII D is that before a property-related fee or charge may be imposed or increased, a public hearing upon the proposed fee or charge must be held and notice must be mailed to the record owner of each identified parcel of land upon which the fee or charge is proposed for imposition. In the public hearing if written protests of the proposed fee or charge are presented by a majority of the owners of affected identified parcel(s), an agency may not impose the fee or charge.

Article XIII D provides that nothing in Proposition 218 shall be construed to affect existing laws relating to the imposition of fees or charges as a condition of property development.

The California Supreme Court decisions in *Richmond v. Shasta Community Services District*, 32 Cal. 4th 409 (2004) ("Richmond"), and *Bighorn Desert View Water Agency v. Verjil*, 39 Cal. 4th 206 (2006) ("Bighorn") have clarified uncertainty surrounding the applicability of Section 6 of Article XIII D to service fees and charges. In *Richmond*, the California Supreme Court upheld a Court of Appeal decision that water connection fees (which included a capacity charge for capital improvements to the water system and a fire suppression charge) imposed by the Shasta Community Services District were not property related fees or charges subject to Article XIII D because a water connection fee results from the property owner's voluntary decision to apply for the connection. In both *Richmond* and *Bighorn*, however, the Court stated that a fee for ongoing water service through an existing connection is imposed "as an incident of property ownership" within the meaning of Article XIII D, rejecting, in *Bighorn*, the

water agency's argument that consumption based water charges are not imposed "as an incident of property ownership" but as a result of the voluntary decisions of customers as to how much water to use.

The District has followed the notice, hearing and protest procedures in Article XIID in connection with wastewater rate increases since its Fiscal Year 2008 rate increases, and plans to follow such notice, hearing and protest procedures in connection with future rate increases.

In addition to the procedural requirements of Article XIID, under Article XIID all property-related fees and charges, including those which were in existence prior to the passage of Proposition 218 in November 1996, must meet the following substantive standards:

- (1) Revenues derived from the fee or charge cannot exceed the funds required to provide the property-related service.
- (2) Revenues derived from the fee or charge must not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership must not exceed the proportional cost of the service attributable to the parcel.
- (4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether characterized as charges or assessments, must be classified as assessments and cannot be imposed without compliance with Section 4 of Article XIID (relating to assessments).
- (5) No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services where the service is available to the public at large in substantially the same manner as it is to property owners.

On April 20, 2015, the California Fourth District Court of Appeal issued a decision in *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano*, 235 Cal.App.4<sup>th</sup> 1493 (2015), holding that the City of San Juan Capistrano's tiered water rates (or inclining block rates) that were in effect from February 1, 2010 through June 30, 2014 violated the requirement of Proposition 218 that a fee or charge for property-related services, such as water delivery, must be proportional to the cost of providing service. In interpreting Proposition 218, the Court of Appeal emphasized that tiered water rates, or inclining block rates, that go up progressively in relation to usage are compatible with Proposition 218. However, the court concluded that Article XIID requires that each tier must reflect the actual costs of service for property owners falling in each of the tiers. The court further concluded that the city had the burden of proof to demonstrate compliance with Proposition 218 and that the city failed to meet its burden of proof in demonstrating that its tiered water rates corresponded to the actual costs of providing service to each tier.

It is District policy to conduct periodic cost of service studies and as part of the most recent study, completed in April 2015, the District focused efforts on developing a strong and clear administrative record for its rates and charges. The District believes that its established and proposed rates for wastewater service comply with the substantive standards of Article XIID. However, due to the uncertainties of evolving case law and potential future judicial interpretations of Proposition 218, the District is unable to predict at this time whether Proposition 218 could be interpreted, for example, to further limit fees and charges for wastewater services and/or to require stricter standards for the allocation

of costs among customers and customer classes. See APPENDIX A – “THE EAST BAY MUNICIPAL UTILITY DISTRICT (THE WASTEWATER SYSTEM) – WASTEWATER SYSTEM FINANCES – Rates and Charges.”

**Article XIIIIC.** Article XIIIIC provides that the initiative power shall not be prohibited or otherwise limited in matters of reducing or repealing any local tax, assessment, fee or charge and that the power of initiative to affect local taxes, assessments, fees and charges shall be applicable to all local governments. Article XIIIIC does not define the terms “local tax,” “assessment,” “fee” or “charge.” On July 24, 2006, the California Supreme Court held in *Bighorn-Desert View Water Agency v. Verjil* that the provisions of Article XIIIIC applied to rates and fees charged for domestic water use. In the decision, the Court noted that the decision did not address whether an initiative to reduce fees and charges could override statutory rate setting obligations. The District and its General Counsel do not believe that Article XIIIIC grants to the voters within the District the power to repeal or reduce rates and charges in a manner that would be inconsistent with the contractual obligations of the District.

The interpretation and application of Proposition 218 will likely be subject to further judicial determinations, and the District is unable to predict the outcome of such determinations, or what, if any, further implementing legislation will be enacted. No assurance can be given that the courts will not further interpret Article XIIIIC and Article XIIID to limit the ability of the District to impose, levy, charge and collect increased fees and charges for wastewater services, or the voters of the District will not, in the future, approve initiatives which seek to repeal, reduce or prohibit the future imposition or increase of assessments, fees or charges, including the District’s wastewater service fees and charges, which are the source of Subordinated Wastewater Revenues pledged to the payment of debt service on the Series 2017A Bonds.

## **Proposition 26**

Proposition 26, which amended Articles XIIIIA and XIIIIC of the California Constitution, was approved by the electorate at the November 2, 2010 election. Proposition 26 imposes a majority voter approval requirement on local governments such as the District with respect to certain fees and charges for general purposes, and a two-thirds voter approval requirement with respect to certain fees and charges for special purposes, unless the fees and charges are expressly excluded. Proposition 26, according to its supporters, was intended to prevent the circumvention of tax limitations imposed by the voters in California Constitution Articles XIIIIA, XIIIIC and XIIID pursuant to Proposition 13, approved in 1978, Proposition 218, approved in 1996, and other measures. Proposition 26 expressly excludes from its scope “a charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product” and “assessments and property-related fees imposed in accordance with the provisions of Article XIIID.” The District believes that its wastewater fees and charges meet the criteria for exclusion under Proposition 26 and that the initiative is not intended to, and would not, apply to fees for wastewater services charged by the District. The District is unable to predict, however, how Proposition 26 will be interpreted by the courts or what its ultimate impact will be.

## **Other Initiatives**

Articles XIIIIA, XIIIB, XIIIIC and XIIID and Propositions 62 and 26 were adopted as measures that qualified for the ballot pursuant to California’s initiative process. From time to time other initiatives have been and could be proposed and adopted affecting the District’s revenues or ability to increase revenues. Neither the nature and impact of these measures nor the likelihood of qualification for ballot or passage can be anticipated by the District.

## **CONTINUING DISCLOSURE**

Pursuant to a Continuing Disclosure Agreement, dated the date of delivery of the Series 2017A Bonds, by and between the District and the Trustee, as dissemination agent, the District will covenant and agree for the benefit of the holders and beneficial owners of the Series 2017A Bonds to provide in an Annual Report certain financial information and operating data relating to the District by not later than 180 days following the end of the District's fiscal year (which currently is June 30 of each year), commencing with the Annual Report for Fiscal Year 2016-17, and to provide notices of the occurrence of certain specified events. The Annual Report and the notices of specified events will be filed by the Trustee on behalf of the District with the Municipal Securities Rulemaking Board through EMMA. The Municipal Securities Rulemaking Board has made such information available to the public without charge through such internet portal. The specific nature of the information to be contained in the Annual Report and the notices of specified events is set forth in APPENDIX F – "FORM OF CONTINUING DISCLOSURE AGREEMENT."

As of the date hereof, the District is in compliance in all material respects with its continuing disclosure undertakings for the last five years. Filings through EMMA are linked to a particular issue of obligations by CUSIP number (which is subject to change after the issuance of obligations as a result of various subsequent actions). The District uses its best efforts to confirm that each report filed through EMMA is linked to all the correct 9-digit CUSIP numbers. However, as a technical matter, it has come to the District's attention that certain filings during the past five years (primarily certain Annual Reports), when made, were not appropriately linked to all applicable CUSIP numbers. The District has since linked the applicable filings to the additional CUSIPs.

## **LITIGATION**

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining the District in the issuance and delivery of, or in any way contesting or affecting the validity of, the Series 2017A Bonds. There is no litigation known to be pending, or to the knowledge of the District, threatened, questioning the existence of the District or the title of the officers of the District to their respective offices.

At any given time, including the present, there are certain other claims and lawsuits against the District that arise in the normal course of operations of the Wastewater System. Such matters could, if determined adversely to the District, affect expenditures by the District, and in some cases, Wastewater Revenues. In the view of the District's management and General Counsel, there is no litigation, present or pending, which will individually or in the aggregate materially impair the District's ability to service its indebtedness or which will have a material adverse effect on the business operations of the District.

## **RATINGS**

S&P Global Ratings ("S&P"), Fitch Ratings, Inc. ("Fitch") and Moody's Investors Service, Inc. ("Moody's") have assigned the Series 2017A Bonds the ratings of "AAA," "AA+" and "Aa2," respectively. No application has been made to any other rating agency for the purpose of obtaining any additional rating on the Series 2017A Bonds. Any desired explanation of such ratings should be obtained from the rating agency furnishing the same. Generally, rating agencies base their ratings on information and materials furnished to them and on investigations, studies and assumptions by the rating agencies. There is no assurance that any rating will continue for any given period of time or that it will not be revised downward or withdrawn entirely by such rating agency if, in the judgment of such rating agency, circumstances so warrant. Any such change in or withdrawal of such ratings may have an adverse effect on the market price of the Series 2017A Bonds.

## **TAX MATTERS**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Special Tax Counsel to the Initial Purchaser (“Special Tax Counsel”), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2017A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”) and is exempt from State of California personal income taxes. Special Tax Counsel is of the further opinion that interest on the Series 2017A Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Special Tax Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. A complete copy of the proposed form of opinion of Special Tax Counsel is set forth in APPENDIX D.

To the extent the issue price of any maturity of the Series 2017A Bonds is less than the amount to be paid at maturity of such Series 2017A Bonds (excluding amounts stated to be interest and payable at least annually over the term of such Series 2017A Bonds), the difference constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each beneficial owner thereof, is treated as interest on the Series 2017A Bonds which is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the Series 2017A Bonds is the first price at which a substantial amount of such maturity of the Series 2017A Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of Initial Purchaser, placement agents or wholesalers). The original issue discount with respect to any maturity of the Series 2017A Bonds accrues daily over the term to maturity of such Series 2017A Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such Series 2017A Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such Series 2017A Bonds. Beneficial owners of the Series 2017A Bonds should consult their own tax advisors with respect to the tax consequences of ownership of Series 2017A Bonds with original issue discount, including the treatment of beneficial owners who do not purchase such Series 2017A Bonds in the original offering to the public at the first price at which a substantial amount of such Series 2017A Bonds is sold to the public.

Series 2017A Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (the “Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a beneficial owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such beneficial owner. Beneficial owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 2017A Bonds. The District has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the Series 2017A Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the Series 2017A Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Series 2017A Bonds. The opinion of Special Tax Counsel assumes the accuracy of these representations and compliance with these covenants. Special Tax Counsel has not undertaken to determine (or to inform any person) whether any

actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Special Tax Counsel's attention after the date of issuance of the Series 2017A Bonds may adversely affect the value of, or the tax status of interest on, the Series 2017A Bonds. Accordingly, the opinion of Special Tax Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Special Tax Counsel is of the opinion that interest on the Series 2017A Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the Series 2017A Bonds may otherwise affect a beneficial owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the beneficial owner or the beneficial owner's other items of income or deduction. Special Tax Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Series 2017A Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the Series 2017A Bonds. Prospective purchasers of the Series 2017A Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation as to which Special Tax Counsel is expected to express no opinion.

The opinion of Special Tax Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Special Tax Counsel's judgment as to the proper treatment of the Series 2017A Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Special Tax Counsel cannot give and has not given any opinion or assurance about the future activities of the District, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The District has covenanted, however, to comply with the requirements of the Code.

Special Tax Counsel's engagement with respect to the Series 2017A Bonds ends with the issuance of the Series 2017A Bonds, and, unless separately engaged, Special Tax Counsel is not obligated to defend the District or the beneficial owners regarding the tax-exempt status of the Series 2017A Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the District and their appointed counsel, including the beneficial owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the District legitimately disagree, may not be practicable. Any action of the IRS, including but not limited to selection of the Series 2017A Bonds for audit, or the course or result of such audit, or an audit of Series 2017A Bonds presenting similar tax issues may affect the market price for, or the marketability of, the Series 2017A Bonds, and may cause the District or the beneficial owners to incur significant expense.

## **VERIFICATION OF MATHEMATICAL COMPUTATIONS**

Grant Thornton LLP, Minneapolis, Minnesota, a firm of independent certified public accountants (the "Verification Agent"), will deliver a report stating that the firm has verified (i) the accuracy of mathematical computations concerning the adequacy of the maturing principal amounts of the Federal Securities to be deposited to the 2007B Escrow Fund and interest to be earned thereon, together with

amounts held as cash in the 2007B Escrow Fund, to pay on the applicable redemption date for the Refunded 2007B Bonds the redemption price of such Refunded 2007B Bonds to be redeemed on such date, plus accrued interest thereon, (ii) the accuracy of mathematical computations concerning the adequacy of the maturing principal amounts of the Federal Securities to be deposited to the 2010A Escrow Fund and interest to be earned thereon, together with amounts held as cash in the 2010A Escrow Fund, to pay interest due with respect to the Refunded 2010A Bonds on and prior to the redemption date therefor, and to pay on such redemption date, the redemption price of the Refunded 2010A Bonds to be redeemed on such date, and (iii) certain mathematical computations supporting the conclusion that the Series 2017A Bonds are not “arbitrage bonds” under the Code, which will be used in part by Special Tax Counsel in concluding that interest on the Series 2017A Bonds is excluded from gross income for federal income tax purposes under present laws, including applicable provisions of the Code, existing court rulings, regulations and Internal Revenue Service rulings.

The report of the Verification Agent will include the statement that the scope of their engagement was limited to verifying the mathematical accuracy of the computations contained in the schedules provided to them and that they have no obligation to update their report because of events occurring, or data or information coming to their attention, subsequent to the date of their report.

### **PURCHASE AND REOFFERING**

U.S. Bancorp Investments, Inc. (the “Initial Purchaser”) purchased the Series 2017A Bonds from the District at a competitive sale at a purchase price of \$82,492,718.53, representing the \$69,420,000.00 aggregate principal amount of the Series 2017A Bonds, less an Initial Purchaser’s discount of \$159,824.97, plus original issue premium of \$13,232,543.50.

The public offering prices may be changed from time to time by the Initial Purchaser. The Initial Purchaser may offer and sell Series 2017A Bonds to certain dealers and others at prices lower than the offering prices shown on the inside cover page hereof.

### **APPROVAL OF LEGAL PROCEEDINGS**

All legal matters incident to the offering of the Series 2017A Bonds are subject to the approval of legality by Norton Rose Fulbright US LLP, Los Angeles, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel. Certain legal matters will be passed upon for the District by its General Counsel. Orrick, Herrington & Sutcliffe LLP, San Francisco, California, is serving as Special Tax Counsel to the Initial Purchaser in connection with the Series 2017A Bonds. The form of approving opinion of Co-Bond Counsel and the form of opinion to be delivered by Orrick, Herrington & Sutcliffe LLP, Special Tax Counsel to the Initial Purchaser, in connection with the issuance of the Series 2017A Bonds are included as APPENDIX D – “PROPOSED FORMS OF CO-BOND COUNSEL OPINION AND SPECIAL TAX COUNSEL OPINION” to this Official Statement.

## CO-MUNICIPAL ADVISORS

The District has retained Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCarley Berry & Co., LLC, San Francisco, California, as co-municipal advisors (the “Co-Municipal Advisors”) in connection with the issuance and delivery of the Series 2017A Bonds. The Co-Municipal Advisors are not obligated to undertake, and have not undertaken to make, an independent verification or assume responsibility for the accuracy, completeness, or fairness of the information contained in this Official Statement.

## INDEPENDENT ACCOUNTANTS

Included as APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015” to this Official Statement are the audited financial statements of the District for the Fiscal Years ended June 30, 2016 and 2015. The District’s financial statements for the Fiscal Years ended June 30, 2016 and 2015, included in APPENDIX B, have been audited by Maze & Associates, certified public accountants. Maze & Associates has not been requested to consent to the inclusion of its report in APPENDIX B and it has not undertaken to update its report or to take any action intended or likely to elicit information concerning the accuracy, completeness or fairness of the statements made in this Official Statement, and no opinion is expressed by Maze & Associates with respect to any event subsequent to the date of its report.

It is District policy to competitively select and retain independent accountants on a periodic basis. Maze & Associates began serving as the District’s independent accountants in Fiscal Year 2005. In 2012, following a request for proposals and competitive selection process, Maze & Associates was retained under contract with the District to serve as independent accountants for the three fiscal years ending June 30, 2012 through 2014, which contract term was subsequently extended in November 2014 for an additional two-year period for the fiscal years ending June 30, 2015 and 2016. In November 2016, the District extended its contract with Maze & Associates to serve as independent accountants pursuant to the contract terms for the final additional two-year period for the fiscal years ending June 30, 2017 and 2018.

## MISCELLANEOUS

References made herein to certain documents and reports are brief summaries thereof and do not purport to be complete or definitive and reference is hereby made to such documents and reports for a full and complete statement of the contents thereof.

Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not to be construed as a contract or agreement between the District and the purchasers or registered owners of any of the Series 2017A Bonds. The delivery and distribution of this Official Statement have been duly authorized by the District.

EAST BAY MUNICIPAL UTILITY DISTRICT



By \_\_\_\_\_ /s/ Alexander R. Coate  
General Manager

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## **APPENDIX A**

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**THE EAST BAY MUNICIPAL UTILITY DISTRICT**

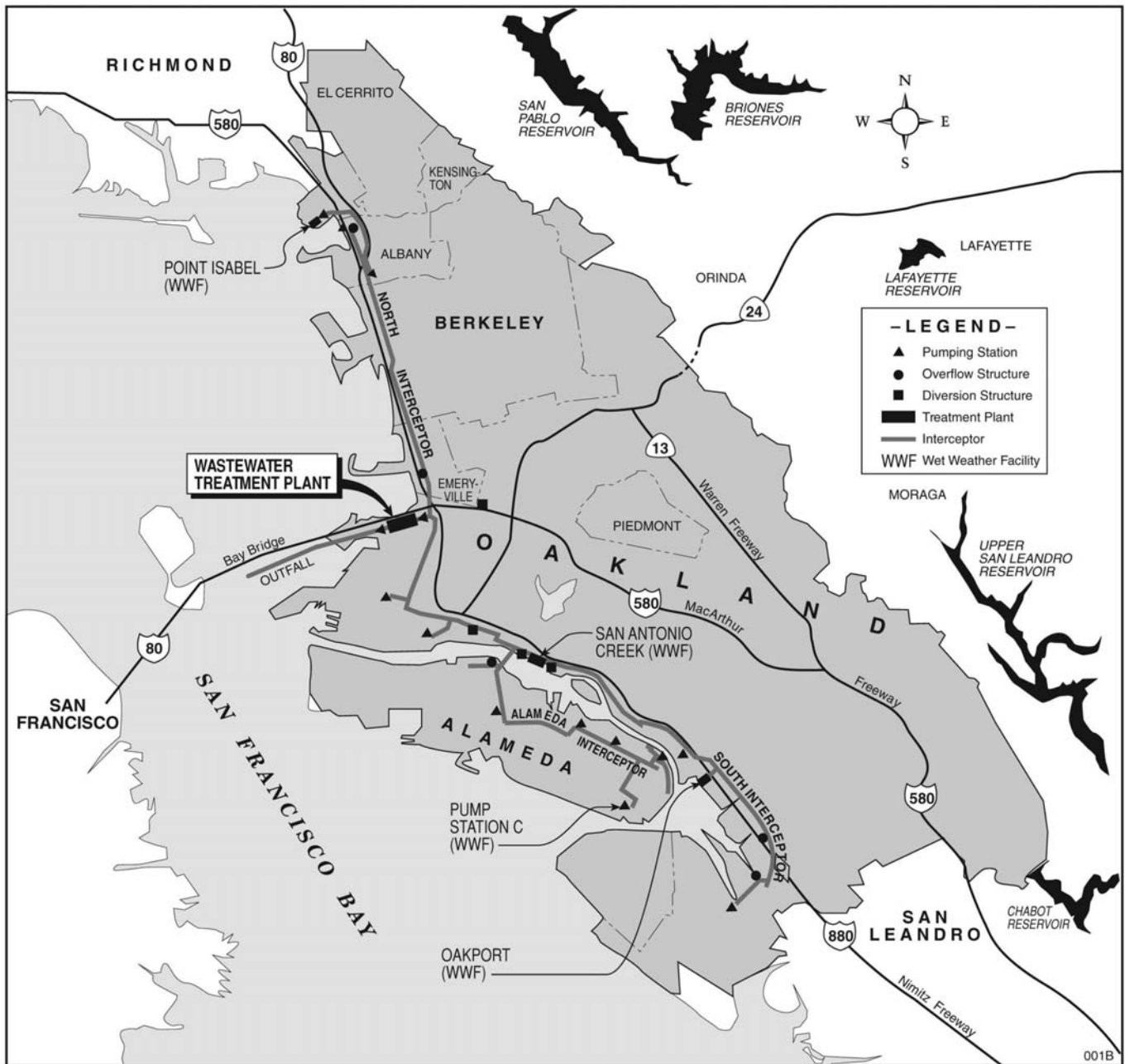
**(THE WASTEWATER SYSTEM)**

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The East Bay Municipal Utility District occupies 332 square miles of the San-Francisco-Oakland metropolitan region. The Wastewater System serves approximately 685,000 persons in an area designated as Special District No. 1, which covers approximately 88 square miles primarily within Alameda County.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
WASTEWATER SYSTEM  
(SPECIAL DISTRICT NO. 1)**



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## THE DISTRICT

### Organization

In May 1923, voters in cities along the eastern shore of the San Francisco Bay located in portions of Alameda and Contra Costa Counties (known throughout the San Francisco Bay Area as the “East Bay”) elected to create the East Bay Municipal Utility District (the “District”) under the provisions of the Municipal Utility District Act. Under the Municipal Utility District Act, municipal utility districts are empowered to acquire, construct, own, operate or control works for supplying the district and public agencies in the territory of the district with light, water, power, heat, transportation, telephone service or other means of communications, means for the collection, treatment or disposition of garbage, sewage or refuse matter, and public recreation facilities appurtenant to its reservoirs and may do all things necessary and convenient to the full exercise of powers granted in the Municipal Utility District Act. The District presently exercises only those functions relating to water supply, power generation and recreational facilities through its Water System, and sewerage and wastewater interception, treatment and disposal and power generation through its Wastewater System, within an area known as Special District No. 1. Special District No. 1 covers only a portion of the service area of the District. The District presently does not intend to exercise other functions. Such other functions and the related facilities, if exercised, would not constitute part of the Water System or the Wastewater System.

### District Board

The District, a public agency, is governed by an elected seven-member Board of Directors (the “Board” or “District Board”) which determines such matters as rates and charges for services, approval of contracts and District policy. Voters elect directors by ward to four-year terms. There are seven wards which together cover the entire service area of the District. Each year, the Board elects from among its members persons to serve as Board officers (i.e. President and Vice President). The current members of the District Board have an average service tenure of approximately 17 years. Each of the multi-term Board members has served one or more years as an officer of the Board and has chaired one or more of the Board’s standing committees that review financial, long-range planning, and legislative matters. The following persons currently serve on the Board:

**Lesia R. McIntosh** has served on the Board since 1999 and represents Ward 1, which includes the Contra Costa County cities of Crockett, Hercules, Rodeo and San Pablo; portions of Richmond and Pinole, and the communities of North Richmond and Selby. Ms. McIntosh is currently President of the Board. She also currently serves as the chair of the District’s Legislative/Human Resources Committee. Ms. McIntosh also represents the District on the Special Districts Association of Contra Costa County and is also serving as an elected member of the ACWA Region 5 board. She served on the 2014 ACWA Federal Affairs Committee. Ms. McIntosh is a member of the Contra Costa County Bar Association, the Charles Houston Bar Association, NAACP – Richmond Chapter, Black Women Lawyers of Northern California, and Black Women Organized for Political Action. Ms. McIntosh is an attorney currently specializing in business, estate planning and probate. She has a Bachelor of Science degree in Political Science from the University of California, Berkeley and a law degree from John F. Kennedy University. Ms. McIntosh’s current term expires on December 31, 2020.

**William B. Patterson** has served on the Board since 1997 and represents Ward 6, which includes portions of Oakland, including East Oakland and the area south of Park Boulevard/5<sup>th</sup> Avenue to the San Leandro city boundary, in Alameda County. Mr. Patterson is currently Vice President of the Board. Mr. Patterson represents the District on the boards for the Upper Mokelumne River Watershed Authority and the Freeport Regional Water Authority. Mr. Patterson has served as a

member of the Oakland Workforce Investment Board. He retired several years ago, after working for many years as the City of Oakland Manager of Parks and Recreation. Mr. Patterson has Bachelor's and Master's degrees from San Francisco State University and a Social Services Certificate from the University of California, Berkeley. His current term expires on December 31, 2020.

**John A. Coleman** has served on the Board since 1990 and represents Ward 2, which includes the Contra Costa County cities of Alamo, Lafayette and Walnut Creek, the Town of Danville, the communities of Blackhawk and Diablo, and portions of Pleasant Hill and San Ramon. Mr. Coleman represents the District on the governing boards of the Upper Mokelumne River Watershed Authority (for which he currently serves as Chair), the Freeport Regional Water Authority and the DSRSD/EBMUD Recycled Water Authority (DERWA). Mr. Coleman is immediate past president of the Association of California Water Agencies (ACWA) board of directors, and serves as a board member of Contra Costa Leadership Council and as a member of the San Francisco Bay Restoration Authority Advisory Committee. He is also a past president of the California Association of Sanitation Agencies, a past Chair of ACWA's Federal Affairs Committee and a past Chair of ACWA's California Finance Water Task Force. Mr. Coleman is employed as the Chief Executive Officer of the Bay Planning Coalition, which represents maritime and shoreline interests and issues in northern California. He has a Bachelor of Science degree in Natural Resources from the University of California, Berkeley and a certificate in management from the University of Pacific School of Business and Public Administration. His current term expires on December 31, 2018.

**Andy Katz** has served on the Board since 2006 and represents Ward 4, which includes Albany, Berkeley, Emeryville and North Oakland in Alameda County, and El Cerrito and Kensington in Contra Costa County. Mr. Katz is employed as an attorney and public health advocate for Breathe California, and is a former Chair of Sierra Club California. Prior to his election to the District Board, he served for five years as a member of the City of Berkeley Zoning Adjustments Board. Mr. Katz has a Bachelor of Arts degree and a Master of City Planning degree from the University of California, Berkeley, and a law degree from Santa Clara University. His current term expires on December 31, 2018.

**Doug A. Linney** has served on the Board since 2000 and represents Ward 5, which includes the Alameda County cities of Alameda and San Lorenzo, the West Oakland and Oakland Airport Area, and a portion of San Leandro. He is active in a number of community and environmental organizations, including the California League of Conservation Voters and the California Interfaith Power and Light. Mr. Linney is employed as President of The Next Generation, a public relations firm providing services that emphasize achieving environmental protection. Mr. Linney has a Bachelor of Science degree in Environmental Science and Public Policy from the University of California, Davis. His current term expires on December 31, 2020.

**Frank G. Mellon** has served on the Board since 1994 and represents Ward 7, which includes the areas of Castro Valley, communities of Cherryland and Fairview; portions of San Leandro and Hayward in Alameda County, and a portion of San Ramon in Contra Costa County. Mr. Mellon also currently serves on the District's Retirement Board. Mr. Mellon represents the District on the governing board of the DSRSD/EBMUD Recycled Water Authority (DERWA) and on the Special District Association of Alameda County. Mr. Mellon is currently a consultant specializing in human resources and labor relations and has taught labor law in the California State University East Bay Human Resources Certificate Program. Mr. Mellon has a Bachelor of Arts degree in Management from the University of Hawaii and a Master's Degree in Business Administration from St. Mary's College in Moraga. His current term expires on December 31, 2018.

**Marguerite Young** was elected to the Board in 2014 and represents Ward 3, which includes the City of Piedmont and a portion of the City of Oakland in Alameda County, and the Contra Costa County cities of Orinda and El Sobrante, the Town of Moraga, and portions of Pinole and Richmond. She also currently serves on the District's Retirement Board. Ms. Young is currently the Corporate Responsibility Director and Senior Policy Analyst for the Service Employees International Union (SEIU) Capital Stewardship Program. Ms. Young was co-chair of the CALFED Bay-Delta Program's Water Quality Committee, which instigated regional cooperation among water agencies to address drinking water quality issues related to Bay-Delta water supplies. As California Director of Clean Water Action, her work also included service as an appointed member of California's Source Water Assessment Advisory Committee, the United States Environmental Protection Agency ("USEPA") Federal Advisory Committee on the Multiple Disinfection By-product Rule, and California's Recycled Water Task Force. She co-founded the League of Conservation Voters-East Bay and is a former board member of Friends of the River. Ms. Young has a Bachelor of Science degree in Natural Resource Economics from the University of California, Berkeley. Her current term expires on December 31, 2018.

### **District Management**

**Alexander R. Coate** joined the District in 1993 and was appointed General Manager in 2011. Mr. Coate has 30 years of experience with public agencies, engineering consulting firms, research and law. He has worked for the District for more than 23 years. Prior to his appointment as General Manager, he was Director of Water and Natural Resources with responsibility for water supply planning, water rights, and watershed management including recreation and fisheries. Mr. Coate is a member of the American Water Works Association and the Association of California Water Agencies. He currently serves on the boards of the California Urban Water Agencies, the California WaterReuse Association, the Western Urban Water Coalition and the Water Research Foundation. Mr. Coate has a Bachelor's degree in Neurobiology and a Master's degree in Civil Engineering, both from the University of California, Berkeley.

**Craig S. Spencer** joined the District in 1995 and was appointed General Counsel in 2015. Previous to his current appointment, Mr. Spencer was Assistant General Counsel at the District and previously served as Chief Trial Attorney. Before joining the District, he was a partner at the law firm of Hassard Bonnington in San Francisco. Mr. Spencer has over 22 years of experience in public law. He has a Bachelor's degree in Economics from the University of California, Santa Barbara and a law degree from Southern Methodist University.

**Sophia D. Skoda** joined the District in 2006 and was appointed Director of Finance in 2015. Prior to her appointment as Director of Finance, Ms. Skoda served as Treasury Manager. In addition, Ms. Skoda has previously served as a Senior Civil Engineer for the District, in which position she was responsible for managing all aspects of the District's resource recovery program. Before joining the District, Ms. Skoda spent nine years with consulting firms providing a range of financial consulting services to water and wastewater utility clients throughout California. She has a Bachelor of Science degree in Civil Engineering from Stanford University and a Master's degree in Civil Engineering from the University of California, Berkeley.

**Xavier J. Irias** joined the District in 1986 and was appointed Director of Engineering and Construction in 2006. Prior to that appointment, he held progressively more responsible positions managing engineering design and engineering services, and he has over 30 years of experience in the engineering field. Mr. Irias has a Bachelor of Science degree in Civil Engineering from the University of California, Berkeley.

**Richard G. Sykes** joined the District in 1989 and was appointed Director of Water and Natural Resources in 2011. Mr. Sykes has held progressively more responsible positions over that time; he has broad knowledge of the District's operations and is very experienced in water quality and regulatory issues. He has a Bachelor's degree in Conservation of Natural Resources and English and a Master's degree in Environmental Engineering from the University of California, Berkeley.

**Michael J. Wallis** joined the District in 1985 and was appointed Director of Operations and Maintenance in 1996. Prior to his current appointment, Mr. Wallis held progressively more responsible positions in the District's Wastewater Department, and served as Director of Wastewater for several years. Mr. Wallis has over 37 years of water and wastewater related experience. He serves on the Board of Directors for the Association of Metropolitan Water Agencies and currently holds the position of Secretary. He has a Bachelor of Science degree and a Master's degree in Civil Engineering from North Carolina State University.

**Eileen M. White** joined the District in 1987 and was appointed Director of Wastewater in 2017. Prior to that appointment, she held progressively more responsible positions managing the operations of the water system and managing engineering design and construction projects in the Wastewater and Water Departments. Prior to joining the District, Ms. White worked as a design engineer for Pacific Gas and Electric Company. She has over 30 years of experience in the engineering field. Ms. White has a Bachelor of Science degree in Civil Engineering from the University of California, Berkeley and is a licensed Civil Engineer in California.

**Rischa S. Cole** joined the District in 1997 and was appointed Secretary of the District in 2017. Ms. Cole has served in a variety of lead administrative roles at the District during her career including Executive Assistant II in the Office of the Secretary and most recently as Assistant to the General Manager. Ms. Cole received her Bachelor of Science degree in Business Administration from California State University, East Bay. She has a Certificate of Completion in Advanced Coursework for the California Special Districts Association's Special District Board Secretary/Clerk Program and is an Associate Member of the International Institute of Municipal Clerks.

**D. Scott Klein** joined the District in 1992 and was appointed Controller in 2003. He has over 33 years of experience in the accounting field. Prior to his appointment, he held progressively more responsible positions in the District's Accounting division. He also chairs the State Controller's Office of California 7-member Advisory Committee on Financial Reporting. Mr. Klein has a Bachelor of Science degree in Industrial Relations and a Bachelor of Arts degree in Accounting from San Francisco State University, a Master's degree in Finance from California State University Hayward, and holds an active accreditation as a Certified Management Accountant.

**Dari Barzel** joined the District in 2013 and was appointed Treasury Manager in 2016. Prior to her appointment as Treasury Manager, Ms. Barzel served as Principal Management Analyst (Debt Administrator) for the District. She has over 27 years of experience in public finance, including over 13 years as a rating analyst in the Public Finance Department of Moody's Investors Service. Ms. Barzel has a Bachelor of Arts degree in English from Barnard College and a Master's degree in Business Administration (Finance concentration) from Columbia University. She is a past President of the California Society of Municipal Analysts and a past member of the Board of the National Federation of Municipal Analysts.

**Travis George** joined the District in 2016 as the District's Debt Administrator. Prior to this role, Mr. George was a rating analyst in the Public Finance Department of Moody's Investors Service. While at Moody's, he covered local government issuers in all of the western states, with a

particular focus on public utilities. Prior to this, Mr. George held positions in the finance departments of Con Edison Company of New York and Bonneville Power Administration. Mr. George has a Bachelor of Arts degree in Economics from Portland State University and Master's degree in Public Administration and Policy from New York University.

## **Employees and Employee Relations**

As of January 1, 2017, the District had 1,601 (full-time equivalent) employees in the Water System and 249 (full-time equivalent) employees in the Wastewater System.

The District has four unions representing approximately 1,705 workers out of a total full-time equivalent workforce of 1,850 employees: Local 2019 of the American Federation of State, County and Municipal Employees (“AFSCME”) represents white collar workers including professionals; Local 444 of AFSCME represents blue collar workers; Local 21, International Federation of Professional and Technical Engineers represents supervisory employees; and Local 39, International Union of Operating Engineers represents water treatment/distribution workers.

Locals 2019, 444, 21 and 39 are each operating under a Memorandum of Understanding (collectively, “MOUs”), approved by the District Board in 2013. Each of the current MOUs expired on April 16, 2017. The District and the labor unions are continuing to negotiate successor MOUs. Until successor contracts are executed, the terms of the expired MOUs will continue to govern. The MOUs are comprehensive in scope and provide for binding arbitration for the resolution of grievances. The District has not had a strike or work stoppage since 1985.

For a discussion of the District Employees’ Retirement System, see “WASTEWATER SYSTEM FINANCES – Employees’ Retirement System.”

## **Service Area**

Originally formed to include nine cities covering 92.6 square miles, the District has grown by more than 450 separate annexations to a present area of 332 square miles in 20 incorporated and 15 unincorporated communities in both Alameda and Contra Costa Counties. It covers the eastern shore of San Francisco Bay from Carquinez Strait on the north to and including San Lorenzo on the south and it extends approximately 20 miles east, beyond the Oakland-Berkeley hills, into Contra Costa County.

The District’s Water System serves this entire area, reaching approximately 51% of the combined population of Alameda County and Contra Costa County. Approximately two-thirds of the population within the District’s service area resides in the cities of Alameda, Berkeley, Oakland, San Leandro, Richmond and Walnut Creek.

The Municipal Utility District Act was amended in 1941 to enable formation of special districts for wastewater service provision. In 1944, voters elected to form the District’s Special District No. 1 to treat wastewater released into the San Francisco Bay. The District’s Wastewater System presently serves approximately 685,000 people in an 88-square-mile area of the two counties along the east shore of the San Francisco Bay, extending from Richmond on the north, southward to Oakland’s border with San Leandro. Domestic, commercial and industrial wastewater is treated for the six participating cities of Alameda, Albany, Berkeley, Emeryville, Oakland and Piedmont, and for the Stege Sanitary District (which includes El Cerrito, Kensington and part of Richmond) (collectively, the “participating agencies”). Each of these participating agencies operates a sewer collection system that discharges into the District’s intercepting sewers. In addition to treating waste received through its interceptors from the participating agencies’ sewer collection systems, the District accepts high-organic waste streams delivered in trucks.

The wastes include domestic waste from septic tanks, fat, oil and grease from restaurants and other food and drink wastes. The District's trucked-waste program continues to expand in the scope of wastes accepted. The District anaerobically digests the high-organic wastes with municipal solids to create renewable energy. This energy is used to power the wastewater treatment facility, with excess energy sold to the Port of Oakland under a power purchase agreement.

### **Taxation of the District**

All property of the District within the District's boundaries generally is exempt from property taxation. District-owned land outside of the District's boundaries is taxable, but improvements constructed on that land by the District are not taxable. As a public agency, the District is exempt from the payment of State of California (the "State") income taxes and federal income taxes.

## **THE WASTEWATER SYSTEM**

### **General**

The District's Wastewater System provides regional wastewater conveyance, treatment, and disposal services for an area within the District designated as Special District No. 1. Special District No. 1, a separate district within the District governed by the Board, was established in 1944 and is administered by the District's Wastewater Department. The Wastewater System began operations in 1951.

Special District No. 1 intercepts, treats and disposes of wastewater within its wastewater service area, which includes the six participating cities of Alameda, Albany, Berkeley, Emeryville, Oakland and Piedmont, and the Stege Sanitary District. Each of the participating agencies maintains its own separate sanitary sewer system (*i.e.*, a system designed to transport sewage separate from the pipe system constructed to convey storm water runoff directly to surface waters), and is responsible for collecting and conveying wastewater to the District interceptors. The participating agencies and Special District No. 1 operate under separate National Pollutant Discharge Elimination System ("NPDES") permits issued by the Regional Water Quality Control Board San Francisco Bay Region (the "Regional Board") and are separately responsible for failures of their own collection, conveyance and/or disposal systems.

In addition to treating wastewater received from the participating agencies through their collection systems, the District also treats high-organic waste streams delivered to District facilities in trucks through its resource recovery program. The trucked wastes include domestic waste from septic tanks, industrial and commercial process wastes, fat, oil and grease from restaurants and other food and drink wastes. See "– Resource Recovery" below.

Table 1 shows the population trends for the seven largest cities within the District's Wastewater System service area, Alameda and Contra Costa Counties and the State for the five years 2012 to 2016.

**Table 1**  
**SEVEN LARGEST CITIES IN DISTRICT WASTEWATER SYSTEM SERVICE AREA**  
**ALAMEDA, CONTRA COSTA COUNTIES AND CALIFORNIA**  
**Population Trends<sup>(1)</sup>**

	2012	2013	2014	2015	2016
Oakland	400,281	408,822	413,626	419,539	422,856
Berkeley	115,199	116,074	117,399	118,923	119,915
Alameda	75,210	76,074	76,785	77,657	79,277
El Cerrito	23,748	23,803	23,980	24,132	24,378
Albany	18,625	18,668	18,682	18,841	18,893
Piedmont	10,844	10,921	11,018	11,138	11,219
Emeryville	10,361	10,592	10,822	10,967	11,721
Total Seven Cities	654,268	664,954	672,312	681,197	688,259
Alameda County	1,543,027	1,566,339	1,587,637	1,610,765	1,627,865
Contra Costa County	1,069,977	1,083,340	1,097,172	1,111,143	1,123,429
California	37,881,357	38,239,207	38,567,459	38,907,642	39,255,883

<sup>(1)</sup> As of January 1 of each year. Includes the six participating cities and El Cerrito, the largest incorporated portion of the Stege Sanitary District service area.

Source: State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties and the State – 2011-2016, with 2010 Census Benchmark*. Sacramento, California, May 2016.

### **Wastewater Facilities**

The District's existing Wastewater System facilities consist of, among other things, the District's Main Wastewater Treatment Plant in Oakland near the entrance of the San Francisco-Oakland Bay Bridge (the "Main Wastewater Treatment Plant") and interceptors and pumping stations for the conveyance of wastewater collected by the participating agencies to the Main Wastewater Treatment Plant, as well as certain wet weather facilities (the "Wet Weather Facilities") which are operated during wet weather events when flows from the participating agencies' collections systems exceed the capacity that can be treated at the Main Wastewater Treatment Plant.

The District's interceptors consist of 29 miles of reinforced concrete gravity pipeline, ranging from 18 inches to 9 feet in diameter, and 8 miles of pressure pipeline from pump stations. The interceptors collect wastewater from approximately 1,700 miles of public sewers owned and operated by the participating agencies. Fifteen pumping stations, ranging in capacity from 1.5 to 60 million gallons per day ("MGD"), lift wastewater throughout the interceptors as it travels to the District's Main Wastewater Treatment Plant for treatment prior to discharge of the treated effluent into the San Francisco Bay. The Main Wastewater Treatment Plant provides secondary treatment for permitted dry weather flow of up to 120 MGD and a maximum flow of 168 MGD during wet weather storm events. Primary treatment can be provided at the Main Wastewater Treatment Plant for a peak of up to 320 MGD, with peak influent hydraulic capacity of 415 MGD when utilizing an on-site 11 million gallon storage basin, a component of the District's Wet Weather Facilities, which is used to temporarily store peak storm flows in excess of the permitted limits for treatment at the Main Wastewater Treatment Plant after flows subside.

Primary treatment removes floating material, oils and greases, sand and silt and organic solids heavy enough to settle in water. Secondary treatment biologically removes most of the suspended and dissolved organic and chemical impurities that would otherwise reduce the oxygen content of the waters of the San Francisco Bay if allowed to decompose naturally. The treatment steps are pre-chlorination, screening, grit removal, primary sedimentation, secondary treatment using high-purity, oxygen-activated sludge, final clarification, biosolids digestion, dewatering and beneficial use of biosolids through land application at non-edible crop farm sites or alternative daily cover at landfills. The treated effluent is then disinfected, dechlorinated and discharged one mile off the East Bay shore through a deep-water outfall into San Francisco Bay.

The annual average daily flow through the District's Main Wastewater Treatment Plant over the last five years has been approximately 58 MGD. See "– Wastewater Flows" below. Peak daily flows from the participating agencies' collection systems to the District's interceptors increase significantly during wet weather primarily due to inflow and infiltration. Inflow is water that enters a sewer system from sources such as roof leaders, yard drains, area drains, manhole covers, and cross-connections between storm sewers and sanitary sewers. Infiltration is water that enters the system from the ground (particularly when saturated due to storms or flooding) through such means as defective pipes, pipe joints, connections or manholes. Although the participating agencies' wastewater collection systems are all separate sanitary systems designed to transport only sewage (with a separate stormwater system in place to discharge stormwater runoff), all sewer systems have some degree of inflow and infiltration of surface water and groundwater.

District facilities designed to address increased flows during wet weather periods include three Wet Weather Facilities (Oakport, San Antonio Creek and Point Isabel), as well as five overflow structures located at Temescal Creek, Oakland Inner Harbor (Alice Street), Oakland Inner Harbor (Webster Street), Elmhurst Creek and San Leandro Creek.

The 158-MGD Oakport Wet Weather Facility, completed in 1990, provides primary treatment for peak wet weather flow diverted along the District's South Interceptor. Following primary treatment, effluent from this facility is currently disinfected and discharged to East Creek Slough in the lower San Francisco Bay. The 100-MGD Point Isabel Wet Weather Facility, completed in 1993, accepts peak wet weather flows from the District's North Interceptor, for primary treatment after which the effluent from this facility is currently disinfected and discharged to the central San Francisco Bay. The 51-MGD San Antonio Creek Wet Weather Facility, completed in 1996, provides preliminary treatment to wastewater diverted from the District's South Interceptor. The effluent from this facility is currently disinfected and discharged to the Oakland Inner Harbor, in lower San Francisco Bay. As described herein, the operations of the District's Wet Weather Facilities are subject to a NPDES permit issued by the Regional Board which prohibits the District from discharging flows from its Wet Weather Facilities to the San Francisco Bay. See "– Regulatory Matters – *Litigation Relating to the District's Wet Weather Facilities NPDES Permit*" below.

The Wet Weather Facilities also serve as storage facilities. After a wet weather event, when the Main Wastewater Treatment Plant again has available capacity, wastewater flows stored in these facilities can be returned to the interceptors for transport to the Main Wastewater Treatment Plant for secondary treatment prior to discharge.

The District's Wet Weather Facilities increase the Wastewater System's wet weather capacity to 724 MGD.

During significant wet weather events, when the carrying capacity of the interceptors and/or the treatment capacity of the Main Wastewater Treatment Plant is exceeded or in the event of a major

Wastewater System failure, the five overflow structures control the location of overflows and allow for the discharge of untreated sewage into the San Francisco Bay when necessary to avoid sanitary system overflows occurring in the collection system or at the Main Wastewater Treatment Plant. (A sanitary sewer overflow occurs when wastewater comes out of the sanitary sewer system, including when it enters a street, residence, business or yard. This is usually caused by blockage, failure or lack of capacity).

See also “– Regulatory Matters” below for a discussion of regulatory framework under which the District’s wastewater facilities operate, including its Wet Weather Facilities, and certain litigation relating thereto.

## **Wastewater Flows**

Table 2 presents a ten-year record of wastewater flows through the Main Wastewater Treatment Plant, expressed as the average daily flow for each Fiscal Year.

**Table 2**  
**AVERAGE DAILY WASTEWATER FLOW**  
**(million gallons per day)**

<i><b>Fiscal Year Ended</b></i>	
<i><b><u>June 30</u></b></i>	<i><b><u>Flow</u></b></i>
2007	67
2008	69
2009	67
2010	68
2011	70
2012	62
2013	61
2014	56
2015	55
2016	56

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Source: The District.

## **Wastewater Source Control Program**

The District’s wastewater service area includes more than 20,000 commercial and industrial accounts. See “WASTEWATER SYSTEM FINANCES – Rates and Charges.” In 1972, the District began a local source control program. Source control involves the removal of such toxics as heavy metals and organic pollutants before discharging wastes into the sewer system. The District’s Wastewater Source Control Program requires pretreatment of wastes by certain categories of industrial customers. The Wastewater Source Control Program has reduced approximately 93% of the amount of heavy metals discharged into sewers, and the District’s treatment process reduces the remaining heavy metals by approximately another 83%. These two steps together have reduced by approximately 99% the heavy metals discharged by the Wastewater System into the San Francisco Bay since 1974. In 1988, source control efforts expanded into pollution prevention/waste minimization activities by educating commercial customers about how to reduce not only heavy metals, but volatile organic compounds as well.

## **Biosolids Management**

The solid, stabilized organic materials removed from the wastewater treatment process are called biosolids. The District generates approximately 80,000 wet tons per year of biosolids from wastewater treatment. Because there is no long-term biosolids storage space available at the Main Wastewater Treatment Plant, each day's biosolids production must have a reliable daily destination for beneficial reuse or disposal. The District's biosolids from its Main Wastewater Treatment Plant are predominantly beneficially reused through land application on non-food crop land or alternative daily cover at landfills. Biosolids handling is managed under a contract, which has a scheduled expiration date of December 31, 2017 subject to an option to extend for two, one-year periods. When landfill alternative daily cover capacity is limited, biosolids are sent for disposal or alternative beneficial reuse processing. These management approaches provide the District with a cost-effective solution to maintain biosolids management reliability.

The District began implementing a Biosolids Environmental Management System in July 2005 and received program certification from the National Biosolids Partnership ("NBP") in September 2006. The District successfully completed external program interim audits in 2007, 2008, 2009, and 2010; a full-program recertification audit in 2011; and interim audits in 2012, 2013, 2014 and 2015. The District developed a robust biosolids management system through the ten years of participation in the certification program. In 2016, the District elected to withdraw from the formal NBP program in favor of maintaining a customized program that continues to focus on continuous improvement, environmental performance beyond meeting regulatory requirements, proactive communications, and implementation of corrective and preventive measures to address programmatic issues without a rigid external audit process.

Consistent with the District's Biosolids Master Plan as updated in 2004 and Board Policy 8.02, the District continues to undertake activities to ensure long-term, cost-effective, and beneficial reuse of biosolids produced at the Main Wastewater Treatment Plant. The District continues to advocate for preservation of its two current beneficial reuse options, land application and landfill alternative daily cover, through industry association leadership positions at the State and national level. In 2017, the District joined a multi-agency Bay Area biosolids coalition dedicated to expanding sustainable uses for biosolids. This coalition has developed several pilot and demonstration scale facilities to test emerging technologies for biosolids processing and energy production.

## **Regulatory Matters**

***General Regulatory Framework.*** The construction and operation of wastewater treatment facilities and the discharge of wastewater are highly regulated activities. The two major laws governing the Wastewater System are the federal Clean Water Act enacted in 1972 (the "Clean Water Act") and the State's Porter-Cologne Act first enacted in 1969 (the "Porter-Cologne Act"). Both laws require that policies, plans, requirements and standards for discharges be developed for all water bodies in order to protect the beneficial uses of the water. The Clean Water Act also regulates the disposal of sewage sludge and authorizes the adoption of sediment standards. The Porter-Cologne Act specifically requires the adoption of sediment standards for enclosed bays and estuaries. In 2008, the State approved sediment quality objectives for enclosed bays and estuaries, including the San Francisco Bay.

The USEPA, the federal agency charged with implementation and enforcement of the Clean Water Act, has delegated much of the planning, permitting and enforcement activities to the states. In California, the State Water Resources Control Board (the "SWRCB") develops policies, plans, requirements and discharge standards for the three types of State waters: inland surface waters, enclosed bays and estuaries, and the ocean.

The Clean Water Act requires the adoption of criteria for priority toxic pollutants that may reasonably be expected to interfere with designated beneficial uses of the waters of the State. As they apply to inland surface waters, enclosed bays, and estuaries, these criteria are found in the California Toxics Rule (“CTR”) promulgated by the USEPA in 2000 (40 C.F.R. §131.38), and are implemented by the SWRCB’s “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California” (commonly known as the State Implementation Plan or “SIP”) approved in 2000 and amended in 2005 (SWRCB Order No. 2005-0019). These two documents form the basis of the NPDES permitting process for Publicly Owned Treatment Works (“POTWs”) in the State. The CTR provides the Water Quality Objectives for priority toxic pollutants and the SIP prescribes the methodology for determining whether a limit for a toxic pollutant should be included in a NPDES permit and the method for calculating the limit if one is needed.

In May 2006, the SWRCB adopted Statewide General Waste Discharge Requirements (“GWDR”) for Sanitary Sewer Systems (SWRCB Order No. 2006-0003-DWQ). The GWDR is a proactive approach to ensure system-wide operation, maintenance and management plans to reduce sewer system overflows. Basic requirements of GWDR include on-line reporting of sewer system overflows and the development of a Sewer System Management Plan.

The Regional Board is the enforcement arm of the State and federal water pollution control programs in the San Francisco Bay region. The Regional Board issues NPDES permits under Section 401 of the Clean Water Act, and establishes waste discharge requirements under the Porter-Cologne Act. Discharge permits are issued for a five-year period. The District’s Wastewater System currently has two NPDES permits, one for the Main Wastewater Treatment Plant and one for the Wet Weather Facilities. The current NPDES permit for the Main Wastewater Treatment Plant (Regional Board Order No. R2-2015-0018) was reissued effective on July 1, 2015 and will expire on June 30, 2020. The NPDES permit for the Wet Weather Facilities (Regional Board Order No. R2-2014-0044) was most recently reissued effective December 1, 2014 and will expire on November 30, 2019. See also “– *Litigation Relating to the District’s Wet Weather NPDES Permit*” below.

***Other Agencies with Regulatory Oversight Affecting the Wastewater System.*** Other regulatory agencies with approval or oversight responsibilities over the construction or operation of the Wastewater System include the Bay Area Air Quality Management District (“BAAQMD”), the Bay Conservation and Development Commission, the California Department of Public Health, and the U.S. Army Corps of Engineers. The roles these other agencies play with respect to operations of the Wastewater System are summarized as follows:

*The Bay Area Air Quality Management District:* responsible for administering and enforcing local, state and federal air emissions regulations and issues air permits under Title V of the federal Clean Air Act (the “Clean Air Act”). The District currently has a BAAQMD-issued Title V air permit for the Main Wastewater Treatment Plant which expires in 2017, as well as a number of permits to operate at its Wet Weather Facilities and pump stations. Air permits are issued for a five-year period. The District expects to submit an application for a new Title V air permit in mid-2017 prior to the current permit’s expiration.

*The Bay Conservation and Development Commission:* responsible for approving all projects undertaken within San Francisco Bay or within 100 feet of the mean high tide line of the Bay.

*The California Department of Public Health:* responsible for setting standards for the use of recycled water.

*The U.S. Army Corps of Engineers:* responsible for approving all construction projects undertaken within navigable waters of the United States.

***District Permit Compliance History.*** As noted above, the District's Wastewater System currently has two NPDES permits, one for the Main Wastewater Treatment Plant, and one for the Wet Weather Facilities. As described below, operation of the District's Wet Weather Facilities is also subject to a Consent Decree effective as of September 22, 2014. Except where expressly authorized by permit, sewer system overflows and the discharge of partially treated or untreated wastewater that reach the surface waters of the U.S. are violations of the Clean Water Act and are subject to fines by the SWRCB and the Regional Board. Since 2000, the District has had fines imposed for unauthorized discharges and permit violations under its NPDES permits for the Wastewater System four times, which has resulted in fines totaling approximately \$550,000. In addition, a fine of approximately \$200,000 was imposed as part of the Consent Decree civil settlement. See "*Litigation Relating to the District's Wet Weather Facilities NPDES Permit*" below. These fines related primarily to wet weather events. The District has also self-reported to the Regional Board four effluent limit violations of its Consent Decree for the Wet Weather Facilities and five sanitary sewer overflows between 2014 and early 2017. No action has yet been taken by the Regional Board with respect to these violations; it is likely that fines will be imposed by the Regional Board. The District does not expect the magnitude of any such fines to be imposed will be material.

The District has had no NPDES effluent limit permit violations at its Main Wastewater Treatment Plant since August 1999.

The Main Wastewater Treatment Plant is also subject to a Major Facility Review Permit (also known as a Title V permit) issued by the BAAQMD pursuant to Title V of the Clean Air Act, the California Health & Safety Code, and BAAQMD regulations. The District has exceeded the permitted hydrogen sulfide limit on digester gas on a total of 5 occasions over the last five years. Additionally, the District has had five violations for the improper release of digester gas to the atmosphere during the last five years. No fine imposed by BAAQMD in the last five years in connection with any one of the foregoing violations totaled more than \$10,000. In response to the hydrogen sulfide violations, the District constructed a new ferric feed system and a digester gas scrubber system to limit the production of hydrogen sulfide gas and remove any significant hydrogen sulfide levels prior to combustion. A capital project to improve the ferric chloride feed system is expected to be completed by 2018. To address the digester gas releases, two new flares have been installed to increase flare capacity at the plant.

***Litigation Relating to the District's Wet Weather Facilities NPDES Permit.*** On January 12, 2007, the SWRCB on its own motion for review issued a draft order (the "Draft SWRCB Remand Order") reviewing the District's 2005 Wet Weather Facilities NPDES Permit (Regional Board Order No. R2-2005-0047) and concluding that the 2005 Wet Weather Facilities NPDES Permit and time schedule order (Regional Board Order No. R2-2005-0048, the "TSO") approved in connection with the issuance of the Wet Weather Facilities NPDES Permit by the Regional Board in September 2005 were inconsistent with the mandates of the Clean Water Act (33 U.S.C. §1251 et seq.) and the implementing USEPA Regulations (40 C.F.R. Part 123). The Draft SWRCB Remand Order concluded that the District's 2005 Wet Weather Facilities NPDES Permit failed to implement secondary treatment requirements and to ensure compliance with applicable water quality standards. Following a public hearing held on May 1, 2007, the SWRCB approved the Draft SWRCB Remand Order with slight modifications (SWRCB Order No. WQ 2007-0004, the "SWRCB Remand Order") and remanded the 2005 Wet Weather NPDES Permit and the TSO to the Regional Board for revisions consistent with the SWRCB Remand Order.

On January 14, 2009, the Regional Board issued the District a subsequent Wet Weather Facilities NPDES permit (Regional Board Order No. R2-2009-0004), effective for the five-year period

January 14, 2009 through January 13, 2014. Previous permits issued by the Regional Board allowed the District to discharge flows from its three Wet Weather Facilities during heavy storm events, following primary treatment and disinfection, as part of a regional solution to help prevent sewer overflows on streets in the East Bay communities. This approach was consistent with USEPA policy at the time the Wet Weather Facilities were constructed. The 2009 permit, however, was more stringent and prohibited the District from discharging any flows from its Wet Weather Facilities to San Francisco Bay even during heavy storm events. Recognizing that discharges from the Wet Weather Facilities cannot be immediately halted without causing sewer overflows, the Regional Board simultaneously issued a Cease and Desist Order (“CDO,” Regional Board Order No. R2-2009-0005) requiring the District to develop a plan for eliminating discharges from the Wet Weather Facilities at the earliest possible date. The CDO noted that the time schedules therein accounted for the considerable uncertainty in determining effective measures to achieve compliance and may be revisited. The inability of the District to meet the terms of the new Wet Weather Facilities NPDES permit also prompted the USEPA, the SWRCB and the Regional Board to seek judicial entry of a Stipulated Order memorializing the compliance plan and rendering it enforceable. Towards that end, a Stipulated Order for Preliminary Relief (the “SO”) was negotiated among the District and the USEPA, the SWRCB, the Regional Board and the Department of Justice. After negotiations were completed, the regulatory agencies initiated a lawsuit against the District on January 15, 2009 (*United States of America, et al. v. East Bay Mun. Util. Dist.*, No. CV 09-0186 RS (N.D. Cal.)) and simultaneously filed the proposed SO for the Court’s approval. The SO was approved by the Court and became effective on July 22, 2009.

The objective of the SO was to develop remedial measures to address the excess wet weather flow issues. It was intended as an interim remedy and was designed to develop information to tailor a final remedy for inclusion in a final Consent Decree which is anticipated to fully and finally resolve the litigation. The SO required the District, among other things, to initiate a number of programs, including: (i) a flow monitoring and data assessment program, including the monitoring of flows to the District’s interceptor system from the participating agencies that discharge into the District’s interceptors (see “Wastewater Facilities” above), the modeling of peak flows under design storm conditions, and the development of alternative sets of capacity flow limits; (ii) a private sewer lateral regional ordinance program requiring the District to develop, adopt and implement a regional ordinance setting standards for the performance of lateral sewer pipes that extend from privately-owned structures to the participating agencies’ collection systems and requiring property owners to obtain private sewer lateral compliance certificates at specified junctures, such as upon sale of property, upon obtaining building permits, and upon requests for changes in District water meter size; (iii) a private lateral incentive program requiring the District to provide \$2 million per year in incentives to encourage private lateral inspection and replacement; (iv) an interceptor system asset management program to develop protocols for interceptor condition assessment, including an inspection of the entire system within five years and annual repairs and reporting; and (v) development of a collection system asset management template through an interactive process among the District, the participating agencies and regulators.

The SO programs represented the first phase in the development of a long-term solution to address peak wet weather discharges. In parallel to the litigation and SO involving the District, the participating agencies that cause and contribute to the District’s Wet Weather Facility discharges entered into their own SO with the USEPA, the SWRCB, the Regional Board and the U.S. Department of Justice, which was approved by the Court in a related lawsuit and became effective on September 6, 2011. The activities undertaken by the participating agencies under their parallel SO yielded further information and progress toward development of a long-term solution.

In January 2013, the District and the participating agencies began joint settlement negotiations with the USEPA, the SWRCB, the Regional Board and the Department of Justice with a goal of adopting a long-term Consent Decree and resolving both parallel lawsuits, which were consolidated. The

negotiators for all parties reached tentative agreement on a proposed Consent Decree, which was approved for execution by their respective approving officials in July 2014. On July 28, 2014, the proposed Consent Decree was lodged with the federal court by the regulatory agencies, and the terms of the proposed Consent Decree were publicly released. On September 22, 2014, the U.S. District Court entered the Consent Decree, which became effective the same day. The final Consent Decree supersedes the SO and lays out a program of work by the District and the participating agencies designed to result in reducing peak wet weather flows over time to the point that the District's Wet Weather Facilities would no longer discharge during storm events smaller than a pre-determined rainfall event. Once the program of work is complete, it is anticipated that, in the vast majority of storms, the District's Wet Weather Facilities would be used only to provide temporary storage of peak flows which would be drained back to the District's Main Wastewater Treatment Plant for secondary treatment and discharge.

The Consent Decree is expected to be in effect for approximately 22 years. The Consent Decree requires the District and the participating agencies to demonstrate by mid-2036 that sufficient work has been performed on their regional wastewater facilities to eliminate discharges from the District's Wet Weather Facilities except during storm events of exceptional magnitude. Under the terms of the Consent Decree, the participating agencies are required to rehabilitate approximately 500 miles of their local wastewater collection systems to reduce infiltration and inflow. The District is required to, among other things: (i) continue the regional private sewer lateral ordinance program developed pursuant to the SO; (ii) upgrade segments of its interceptors; (iii) develop and implement a regional technical support program to identify inflow sources within the participating agencies' regional collection systems and assist in prioritizing them for repair by the participating agencies; and (iv) design and implement a plan to evaluate performance through flow monitoring and modeling and to report to the regulatory agencies on the overall progress toward achieving the Consent Decree mandates. The Consent Decree requires the District and the participating agencies to meet certain pre-established interim benchmark percentage reductions for Wet Weather Facility discharges (8 and 16 years into the Consent Decree term). Failure to achieve any of these targets would result in additional flow monitoring obligations under the Consent Decree and may also result in revisions to the work plan developed under the Consent Decree. Work plan revisions could include additional work obligations for the District and/or the participating agencies. If and when work plan revisions become necessary, the Consent Decree parties would negotiate the nature and scope of such revisions and, if additional expenditures are required to implement the revisions, each party's share of such expenditures.

The District's identified goal in developing the Consent Decree was to achieve a plan that serves the interests of the District and its ratepayers by adequately reducing wet weather flows while ensuring any necessary financial investments are apportioned and scheduled in the most cost-effective and equitable manner possible. The District currently estimates that the cost of implementation of the programs and activities required to be undertaken by the District under the Consent Decree (exclusive of certain of the interceptor improvements which the District would expect to budget and undertake in the normal course of its long-term capital improvement program) would average approximately \$5 million per year over the life of the Consent Decree, portions of which are ongoing projects or programs included in the current capital and operating budgets. Under the terms of the Consent Decree, the District and the participating agencies paid certain civil penalties, the District's share of which was \$201,600. The Consent Decree provides for the possible future imposition of financial penalties on the District and/or the participating agencies in the event of failure to perform the required work or meet a deadline established under the Consent Decree.

The RWQCB reissued the District's NPDES permit for the Wet Weather Facilities (Regional Board Order No. R2-2014-0044) on November 12, 2014. The prior permit expired in January 2014 during Consent Decree negotiations. The reissued permit became effective on December 1, 2014 and will remain in effect for up to five years. The District believes the reissued permit is consistent with Consent Decree

obligations and does not impose significant new obligations on the District. Also on November 12, 2014, the Regional Board reissued NPDES permits for the sanitary sewer collection systems of the participating agencies. These reissued permits of the participating agencies also became effective on December 1, 2014.

***Future Statutory and Regulatory Compliance.*** As noted above, the construction and operation of wastewater facilities and the discharge of wastewater are highly regulated activities. Federal, State and local standards and regulations are subject to change. Changes in the scope and standards for regulation of wastewater systems, such as the District's Wastewater System, may lead to more stringent operating requirements and the imposition of future administrative or judicial orders issued by federal or State regulators or a court. Compliance with future requirements and orders that may be adopted could impose substantial additional costs on the Wastewater System. Furthermore, claims against the Wastewater System for failure to comply with applicable laws and regulations could be significant. The District is actively involved with major wastewater industry associations and routinely monitors and participates in the regulatory process in order to ensure that a "sound science" approach is applied in determining the need, and (if deemed necessary) implementation approach, for potential regulatory changes. However, no assurance can be given that the laws and regulations currently in effect will not change or that the Wastewater System will always be able to obtain all required operating permits or that the cost and/or impact of compliance with applicable laws, regulations or orders will not adversely affect the finances or operations of the District's Wastewater System.

One area identified for potential future regulatory change is with respect to the discharge of nutrients. Wastewater often contains large amounts of nitrogen and phosphorus, known as nutrients. There is some data indicating that there are potential impairment issues in San Francisco Bay related to these nutrients, a significant portion of which come from wastewater treatment plants. The District is a principal agency of the Bay Area Clean Water Agencies ("BACWA"), a joint powers agency, formed under the California Government Code by the five largest wastewater treatment agencies in the San Francisco Bay Area, presently supporting a multi-year work plan to study possible impairment of the San Francisco Bay due to nutrients. BACWA is also engaged in an effort with the Regional Board that resulted in the development of a watershed-based permit for all of the San Francisco Bay wastewater agencies in order to provide a level of regulatory certainty for the timeframe of the study. The NPDES permit (Regional Board Order No. R2-2014-0014), which became effective on July 1, 2014, requires wastewater agencies to monitor and evaluate approaches to reduce nutrient discharges, and provides financial support to fund regional scientific studies investigating nutrient impacts to San Francisco Bay. At this time, the District is unable to predict the outcome of these studies or the likelihood or implications of any future nutrient-related regulations that may be adopted; however, the District will continue engaging with regulators and stakeholders on this issue. The District has received a grant from the USEPA to evaluate alternative approaches to reduce nutrients.

## **Resource Recovery**

In 2001, the District initiated a pilot program to provide revenue enhancement for the Wastewater System through the utilization of excess dry weather capacity at its Main Wastewater Treatment Plant to accept trucked waste from outside its service area. The District's resource recovery program accepts a variety of trucked liquid and solid waste streams from outside the service area of Special District No. 1 for disposal in an environmentally sound manner. High strength trucked wastes are discharged into underground tanks, processed and anaerobically co-digested with biosolids. This program provides an additional source of methane gas for use in the District's power generation plant at the Main Wastewater Treatment Plant (see "– Power Generation/Energy Recovery" below) and generates an additional source of revenue for the Wastewater System through the collection of tipping fees charged to the trucked waste haulers. See also "WASTEWATER SYSTEM FINANCES – Resource Recovery Revenues."

## **Power Generation/Energy Recovery**

In addition to biosolids, another wastewater treatment byproduct is methane gas, which is produced by the sludge digestion process. The District currently operates a 10.8 megawatt power generation plant fueled by the methane gas produced at the Main Wastewater Treatment Plant, consisting of three 2.1 megawatt engines installed in 1985 and an additional 4.5 MW turbine installed in 2011, which is utilized to supply energy to operate the Main Wastewater Treatment Plant. As a result of the installation of the additional turbine in 2011, the District is able to generate more electric energy than that required to operate the Main Wastewater Treatment Plant, making the District's Main Wastewater Treatment Plant the first net electricity producing wastewater facility in the United States. Electrical energy produced in excess of that needed for plant operations is sold back to the utility grid. The ability to generate power to operate the Main Wastewater Treatment Plant facility reduces the District's exposure to energy cost volatility in its Wastewater System operations.

## **Climate Change**

The effects of global climate change are expected to increase the risk of flooding at wastewater facilities due to the greater frequency of high precipitation events and sea level rise. The District has developed mitigation and adaptation strategies to deal with the changing climate and its effect on its wastewater facilities. In 2008, the District incorporated climate change into its Strategic Plan, and has developed and implemented a climate change monitoring and response plan, which includes specific guidance on infrastructure planning.

The District's response to climate change focuses on:

- keeping current with science and assessing potential effects of climate change in the Mokelumne and East Bay watersheds and on local East Bay facilities, including the District's wastewater facilities such as the Main Wastewater Treatment Plant;
- determining water supply and infrastructure vulnerabilities;
- monitoring and reducing greenhouse gas emissions caused by the District's operations;
- integrating climate change in strategic planning and budgeting decisions;
- advocating for new legislation and regulations that help water and wastewater agencies better respond to climate change; and
- developing adaptation and mitigation strategies as part of water supply management and wastewater treatment programs.

## **Security and Emergency Preparedness**

The District has implemented a security program to provide a secure work place; maintain safe and reliable water supply and wastewater services; and to prevent or mitigate potential damage or loss of assets from internal and external threats. The District's Security Office manages the security program which includes assessment, capital, operational and coordination elements. These efforts are guided by the Security Vulnerability Assessment (SVA), water/wastewater industry experience, actual experience at District facilities, and industry standards/guidelines. The program's systems, procedures, and personnel are designed to deter, detect, delay and assess potential criminal actions.

The District has a Security Operations Control Center (the "SOCC") that is staffed seven days a week, 24 hours a day. The SOCC houses a proprietary centralized security system to monitor access controls, video cameras and recorders, and security alarms. The dispatchers at the SOCC monitor alarms,

assess conditions using the security system, and dispatch security and law enforcement response as needed for alarms and reports of suspicious circumstances or crimes at District facilities. The security system maintains access controls for water and wastewater treatment, administrative and maintenance facilities, its storage yards and service centers, and the reservoirs and pumping plants in its water distribution system. District security includes an internal security staff and security contractors. Contract security officers are also used to supplement automated access controls at certain key facilities.

The District maintains an active emergency preparedness program that includes an Emergency Operations Plan (EOP) to help manage the District's critical operations during any emergency and protect people, property, and the environment. The District also maintains a Business Continuity Program Plan (BCPP) to minimize impacts to critical business functions and enhance its capability to recover operations expediently and successfully following a disruptive incident. Pursuant to state law, District employees are sworn disaster service workers, and staff is trained to use California's Standardized Emergency Management System (referred to as SEMS) and the National Incident Management System (NIMS) in response to emergencies and security incidents. As part of its Emergency Operations Plan, the District maintains two strategically located emergency operations centers and a mobile emergency command center, and has in place an emergency operations team to lead emergency response activities. The District also has adopted business continuity plans for individual work units to ensure the District's ability to respond to, and recover from, any emergency or other event that disrupts its normal business functions.

The District's cyber security program leverages a defense-in-depth approach to maintain the confidentiality, integrity, and availability of the District's business information systems, data, and water and wastewater control systems. There are dedicated IT Security staff who perform a variety of functions, including intrusion detection and prevention, incident response, monitoring for malware, vulnerabilities, and anomalous network traffic, promoting cyber security awareness to District staff, and auditing the environment to ensure that configurations remain consistent with security objectives as well as implementing new security controls as needed to stay ahead of continually evolving security threats. Third party audits and vulnerability assessments are also utilized to identify any potential areas of improvement for the overall cyber security program. The District also maintains a backup data center to facilitate recovery of critical business systems after a disaster.

### **Seismic Matters**

The District is located in a seismically active region of California. The Hayward Fault runs through the entire western portion of the District and the Calaveras Fault runs through the southeastern portion of the District. The Concord Fault is located several miles to the east of the District and the San Andreas Fault is located to the west.

The District commissioned a seismic evaluation study, completed in 1994, that examined the potential impacts on the District's Wastewater System of various magnitudes of earthquakes along the Hayward Fault. The study found that many of the Wastewater System facilities are located on poor soil and could be affected by liquefaction and settlement. Although structures supported on pile foundations should withstand the liquefaction with minimal structural damage, piping and electric conduit penetrating into basement walls of these structures could be sheared, effectively causing loss of function in the facility. The study further concluded that, in the event of the largest credible earthquake measuring 7.5 on the Richter scale from the Hayward Fault, approximately half of the facilities at the Main Wastewater Treatment Plant would suffer significant damage, that three of the District's 15 pump stations could possibly experience loss of function and that interceptor blockage could lead to sewage backup into the San Francisco Bay or onto city streets. A major earthquake could also have a severe adverse impact on the economy of the District's wastewater service area.

In response to the 1994 seismic evaluation study, the District initiated a multi-year Wastewater Seismic Repairs Program, which focused on the retrofit of all the facilities that, if a failure occurred, would endanger life and/or public health. All of the high priority projects identified in the 1994 seismic evaluation study have been completed. Each of the operations center, sludge dewatering building, primary sedimentation blower building and oxygenation tank control buildings have been seismically retrofitted. The District has also made seismic improvements through other capital upgrade projects. The District will continue to undertake projects designed to reduce the possibility of significant damage to the Wastewater System and enhance seismic safety as part of its comprehensive capital improvement project planning process (discussed under “– Capital Improvement Program” below).

Despite the completed and continuing seismic work, in the event of significant earthquake damage to the Wastewater System and/or the District’s service area, there can be no assurance that Subordinated Wastewater Revenues would be sufficient to pay the principal of and interest on any outstanding Wastewater System Revenue Bonds.

### **Capital Improvement Program**

Since Fiscal Year 2002, the District has implemented a biennial budget. In the Spring of odd-numbered years, a budget is presented to the Board for consideration for the two ensuing Fiscal Years. The District’s biennial budget planning process includes a review of projected long-term (10 years or longer) facilities needs and the development of a capital expenditure forecast for the ensuing five fiscal years. A series of master plans document the identified facilities needs by asset classes and include assessments of the District’s key facilities, taking into consideration condition assessments, operational performance and maintenance histories. Facilities in need of rehabilitation or replacement are identified and prioritized. Project scopes are also defined (for example, replacement of aging mechanical or electrical equipment, seismic upgrades, or other defined scopes).

The results of the master plans are considered during the biennial update to the Capital Improvement Program (the “CIP”). The previous CIP update was completed in 2015 in connection with the development of the District’s biennial budget for Fiscal Years 2016 and 2017 and included a five-year capital expenditure forecast for Fiscal Years 2016 through 2020. Based upon this CIP forecast, the District’s expenditures for capital improvements to the Wastewater System for Fiscal Years 2016 through 2020 were estimated to aggregate approximately \$168.5 million.

An updated forecast of projected CIP expenditures and projects covering the five Fiscal Years 2018 through 2022 has been developed in connection with the District’s proposed biennial budget for Fiscal Years 2018 and 2019. The proposed biennial budget, including the five-year capital expenditure forecast for Fiscal Years 2018 through 2022, was presented to the Board on April 11, 2017. The biennial budget for Fiscal Years 2018 and 2019 is scheduled for consideration for adoption by the Board on June 27, 2017.

In the Fiscal Year 2018 through 2022 CIP, the District is continuing its focus on investments in infrastructure rehabilitation, repair and replacement and improvements designed to ensure ongoing compliance with new and existing wastewater regulations and permit requirements. The five-year CIP cash expenditures are projected to aggregate approximately \$187.7 million, an 11.4% percent increase over the current budget.

Table 3 summarizes the District’s Fiscal Years 2018 through 2022 projected CIP cash expenditures by major category as forecast in the proposed biennial budget for Fiscal Years 2018 and 2019.

**Table 3**  
**Fiscal Years 2018-2022**  
**Capital Improvement Program**  
**Proposed FY 2018 and FY 2019 Biennial Budget**  
**Forecast – Cash Expenditures<sup>(1)</sup>**  
**(Thousands)**

	<i>Fiscal Year Ending June 30,</i>					
	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total<sup>(3)</sup></i>
Maintaining Infrastructure	\$33,120	\$33,130	\$33,394	\$27,342	\$26,264	\$153,252
Regulatory Compliance	5,272	3,394	1,532	4,316	4,364	18,878
Admin. & General Expenses <sup>(2)</sup>	<u>3,000</u>	<u>3,000</u>	<u>3,090</u>	<u>3,183</u>	<u>3,278</u>	<u>15,551</u>
Total <sup>(3)</sup>	<u>\$41,394</u>	<u>\$39,525</u>	<u>\$38,016</u>	<u>\$34,840</u>	<u>\$33,906</u>	<u>\$187,681</u>

<sup>(1)</sup> Cash expenditures include spending for projects appropriated in earlier Fiscal Years.

<sup>(2)</sup> Includes overhead, construction management and other administrative costs which are allocated to individual projects upon their completion.

<sup>(3)</sup> Totals may not add due to rounding.

Source: The District.

The cost estimates are subject to revision in connection with the subsequent five-year CIP forecast prepared as part of the biennial budget planning process. See also “– *Construction-Related Risks*” below.

Included in the District’s five-year capital plan for Fiscal Years 2018 through 2022 as reflected in the proposed biennial budget for Fiscal Years 2018 and 2019 are the major programs and projects described below:

***Maintaining Infrastructure.*** The projects and programs in this category are aimed at furthering the District’s objectives to improve, rehabilitate and replace aging infrastructure in a cost effective manner to ensure sustainable delivery of reliable, high quality service at both the Main Wastewater Treatment Plant and remote facilities. The primary work scheduled to be undertaken focuses on rehabilitating the digesters, concrete structures, and treatment process facilities at the Main Wastewater Treatment Plant; implementing odor control improvements; and rehabilitating sections of the sewer interceptor system.

The Digester Upgrade project involves the rehabilitation of the digesters which perform a key role in stabilizing wastewater solids prior to disposal. Interior coatings applied to some digesters are experiencing failure, and the coatings are scheduled to be repaired in Fiscal Years 2018 and 2019. Over the five-year period from Fiscal Year 2018 through Fiscal Year 2022, replacement of the floating covers on Digester Nos. 3 and 4, and the membrane on Digester No. 2 is planned, along with seismic upgrades, mechanical piping work, and associated electrical and control upgrades.

The Concrete Rehabilitation project addresses critical concrete structures, channels and gates at the Main Wastewater Treatment Plant as sulfides and other constituents in the wastewater have accelerated corrosion. Repair of the primary tank channels is being conducted in phases and includes replacement of valves, gates and control panels. Phases 3 through 6 are scheduled to take place during Fiscal Years 2018 through 2021. Repairs to the secondary aeration reactor basins are scheduled to be completed in four phases with the repair of two tanks per year starting in Fiscal Year 2018.

The Odor Control project provides for odor control facilities to improve the air quality in communities along the collection system and at the Main Wastewater Treatment Plant. Planned work includes replacing the odor control units at the influent pump station coarse screen and intake structure in Fiscal Years 2018 and 2019; replacing the scrubber system at the resource recovery receiving station during Fiscal Years 2018 through 2020; and covering portions of the primary sedimentation tanks and providing two new chemical scrubbers during Fiscal Years 2018 through 2021.

The Treatment Plant Infrastructure projects provide for the cyclical replacement and rehabilitation of various treatment process facilities at the Main Wastewater Treatment Plant. Work planned for Fiscal Years 2018 through 2022 includes the replacement of large variable frequency drives; repair or replacement of flow meters; laboratory upgrades; rehabilitation of the secondary clarifiers; installation of a plant-wide intercom system; improvements to the plant gallery drains and internal plant drain; upgrades to the security system; improvements to the East Gate Undercrossing; grit handling equipment replacement; and improvements to the Administration and Operations Buildings.

The Interceptor Rehabilitation program includes several projects to rehabilitate portions of the interceptor system that are approximately 60 years old. Over the five-year capital plan period, all phases of the rehabilitation of a 9,200 foot portion of the 105-inch diameter South Interceptor along 3rd Street are scheduled to be completed.

The Pump Station Improvements program includes upgrades to various pump stations such as the replacement of equipment; sump pumps and flow meters; the addition of programmable logic controllers and software; access improvements; and the replacement of discharge piping. Work is scheduled for Pump Station M in Alameda in Fiscal Years 2019 and 2020, Pump Station L in Oakland in Fiscal Years 2020 and 2021, and Pump Station C in Alameda in Fiscal Years 2022 and 2023.

The Resource Recovery program was developed to accept a wide variety of solid and liquid wastes delivered by truck to the Main Wastewater Treatment Plant. Upgrades planned in Fiscal Years 2018 through 2020 include improvements to the solid/liquid waste receiving station and the blend tank receiving station which will result in the ability to accept additional high-strength waste.

***Regulatory Compliance.*** Projects in the Regulatory Compliance category are designed to further the District's objectives to operate and maintain facilities to meet all water discharge, air emission, and land disposal requirements; to ensure protection and stewardship of San Francisco Bay; and implement preventative and corrective maintenance programs. Work in this category is focused on developing strategic nutrient management solutions to meet current and potential future regulatory requirements.

The North Interceptor Pump Station Q Project includes modifications to portions of the North Interceptor to allow dual-mode operation of Pump Station Q (PS Q) for use as either a gravity relief sewer (north to south flow) or a forcemain (south to north flow). Based on wet weather flow modeling work completed to date, discharges from the wet weather facilities may be reduced by operating the PS Q forcemain as a gravity sewer with relatively minor modifications. Construction began in Fiscal Year 2017 and is expected to be completed in Fiscal Year 2019.

The Nutrient Management Project includes the development of strategic nutrient management solutions to meet current and potential future regulatory requirements. Starting in Fiscal Year 2018, a master plan will be developed to identify and evaluate a range of cost-effective alternatives to achieve nutrient reductions for the Main Wastewater Treatment Plant that provide broad environmental and public health benefits. The planned work includes conducting one or more pilot-scale tests to evaluate promising sidestream nutrient treatment/recovery technologies. It also includes the implementation of sidestream and mainstream treatment, if necessary, in Fiscal Year 2021 and beyond.

**Other Potential Projects.** The District also has appropriated funds to meet unanticipated capital needs and for projects that are seeking grant funding. These funds will be used to pay for capital expenditures such as replacements or repairs to facilities and equipment and to fund new or accelerate existing projects in between budget cycles. Funds will also be available for grant funded projects that normally require the District to fund the costs and then apply for reimbursements. The District also has contingency funds in its capital budget for costs associated with the potential expansion of the District's existing food waste processing facility, the acquisition and construction of a new food waste processing facility or a new dedicated dewatering facility to accommodate potential growth in the receipt of food waste for anaerobic digestion.

The District's currently estimated funding sources for its CIP for Fiscal Years 2018 through 2022 as reflected in the proposed biennial budget for Fiscal Years 2018 and 2019 are set forth in Table 4:

**Table 4**  
**Fiscal Years 2018-2022**  
**Proposed FY 2018 and FY 2019 Biennial Budget**  
**Sources of Funds for Capital**  
**Improvement Program Expenditures**

<i><b>Funding Sources</b></i>	<i><b>(Millions)</b></i>
Revenues	\$122.5
Bond Proceeds	65.2
Commercial Paper Proceeds	0.0
Advances, Contributions and Reimbursements	0.0
Total	<u>\$187.7</u>

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Source: The District.

**Construction-Related Risks.** Construction projects for the Wastewater System are subject to ordinary construction risks and delays applicable to projects of their kind, including but not limited to (i) inclement weather affecting contractor performance and timeliness of completion, which could affect the costs and availability of, or delivery schedule for, equipment, components, materials, labor or subcontractors; (ii) contractor claims or nonperformance; (iii) failure of contractors to execute within contract price; (iv) work stoppages or slowdowns; (v) failure of contractors to meet schedule terms; (vi) errors or omissions in contract documents requiring change orders; (vii) the occurrence of a major seismic event; or (viii) unanticipated project site conditions, including the discovery of hazardous materials on the site or other issues regarding compliance with applicable environmental standards, and other natural hazards or seismic events encountered during construction. In addition, Wastewater System construction projects may require scheduling system shutdowns to avoid impacting services and many shutdown windows are inflexible. Increased construction costs or delays could impact the Wastewater System's financial condition in general and the implementation of its CIP in particular. Construction bids may also be higher than anticipated for budgeting purposes.

## WASTEWATER SYSTEM FINANCES

### Basis of Accounting

The District reports operations on a Fiscal Year basis (currently July 1 through June 30). Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business enterprises, where the costs of providing goods and services to the general public are financed or recovered primarily through user charges. Enterprise funds are accounted for using the accrual basis of accounting. The accounting policies of the District conform to generally accepted accounting principles for municipal water and wastewater utilities. The accounts are maintained substantially in accordance with the Uniform System of Accounts prescribed for investor-owned and major municipally-owned water and wastewater utilities.

### Sources of Funds

The District finances its wastewater operations with rates and charges, a share of the county-wide real property tax levy, and an *ad valorem* property tax levied to meet general obligation bond debt service payments. The Wastewater System's principal source of revenues is dry weather user charges billed directly to customers of the participating agencies. In Fiscal Year 2016, dry weather user charges of \$66.0 million provided approximately 56.4% of the Wastewater System's \$117.1 million total sources of funds. Wet weather facilities charges collected on the property tax bills issued by Alameda and Contra Costa County accounted for approximately 18.7% of the total sources of funds of the Wastewater System and are designed to recapture the cost of financing the District's Wet Weather Facilities. The District's resource recovery program generated approximately 9.9% of the Wastewater System's total sources of funds in Fiscal Year 2016.

Table 5 sets forth the District's Wastewater System sources of funds for the five Fiscal Years ended June 30, 2016. The sources of funds in Table 5 include certain funds which do not constitute Subordinated Wastewater Revenues for purposes of funds pledged under the Indenture. Subordinated Wastewater Revenues include all charges received for, and all other income and receipts derived by the District from, the operation of the Wastewater System or arising from the Wastewater System, which includes, without limitation, the District's dry weather user charges, wet weather facilities charges, wastewater capacity fees and resource recovery program revenues, as well as investment income, less Operation and Maintenance Costs. Property taxes are applied to reduce Operation and Maintenance Costs or to pay debt service on the District's outstanding general obligation bonds and are not pledged to the repayment of the Wastewater System Revenue Bonds. See "– Property Tax Revenues" below. Certain grants and contributions earned on construction which are restricted to use for specified purposes are not included in Subordinated Wastewater Revenues for purposes of the Indenture. Only Subordinated Wastewater Revenues are pledged to the payment of the Wastewater System Revenue Bonds. See "SECURITY FOR THE SERIES 2017A BONDS – Pledge of Subordinated Wastewater Revenues" in the front part of this Official Statement. Comparative summaries of the Wastewater System's historical operating results and debt service coverage ratio for each of the last five Fiscal Years appear in Table 15.

**Table 5**  
**WASTEWATER SYSTEM SOURCES OF FUNDS**  
**Five Fiscal Years ended June 30, 2015**  
**(Millions)**

	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
<b>Operating Revenue and Other Income:</b>					
Dry Weather User Charges	\$55.2	\$ 58.8	\$ 61.8	\$ 65.1	\$ 66.0
Wet Weather Facilities Charges	17.2	18.3	19.4	21.8	21.9
Resource Recovery	9.1	9.2	10.6	11.3	11.6
Interest <sup>(1)</sup>	1.6	0.3	0.2	0.3	0.4
Taxes <sup>(2)</sup>	8.3	9.4	9.9	8.5	7.9
Other Revenues <sup>(3)</sup>	<u>3.5</u>	<u>4.1</u>	<u>6.3</u>	<u>5.6</u>	<u>5.2</u>
<b>Total Revenues</b>	<b>\$94.9</b>	<b>\$100.1</b>	<b>\$108.2</b>	<b>\$112.6</b>	<b>\$113.0</b>
<b>Capital Contributions:</b>					
Wastewater Capacity Fees	\$ 2.8	\$ 1.3	\$ 0.8	\$ 2.8	\$ 3.1
Earned contributions on construction	0.0	0.0	0.0	0.0	0.7
Grants and reimbursements	<u>0.0</u>	<u>0.3</u>	<u>0.4</u>	<u>0.3</u>	<u>0.3</u>
<b>Total Contributions</b>	<b><u>\$ 2.8</u></b>	<b><u>\$ 1.6</u></b>	<b><u>\$ 1.2</u></b>	<b><u>\$ 3.1</u></b>	<b><u>\$ 4.1</u></b>
<b>TOTAL</b>	<b><u>\$97.7</u></b>	<b><u>\$101.7</u></b>	<b><u>\$109.4</u></b>	<b><u>\$115.7</u></b>	<b><u>\$117.1</u></b>

(1) Includes interest earnings on amounts in the Wastewater System Fund, including earnings on proceeds of the District's Wastewater System Revenue Bonds.

(2) Includes the District's share of 1% countywide property tax and the *ad valorem* tax levied for repayment of Special District No. 1's general obligation bonds.

(3) Other Revenues also includes revenues received from the sale of energy to the utility grid. See "THE WASTEWATER SYSTEM – Power Generation/Energy Recovery." Other Revenues excludes reimbursements and certain other receipts applied directly to operating expenses.

Source: The District.

### **Rates and Charges**

The District's rates and rate structure are established by the District's Board after a public hearing process, and are not subject to regulation by any other agency. Under California law, the imposition of, or any increase in, a property-related fee or charge, including fees and charges for ongoing wastewater service, is subject to specified procedural requirements (including notice, hearing and protest procedures). In addition, pursuant to California law all such property-related fees and charges meet certain substantive standards, including that such fees and charges must be proportional to the cost of providing service. See "CONSTITUTIONAL AND STATUTORY LIMITATIONS ON TAXES AND APPROPRIATIONS – Proposition 218" in the front part of this Official Statement for a discussion of the procedural and substantive requirements to which the District's rate increases are subject.

From Fiscal Year 2013 through Fiscal Year 2017, total annual residential wastewater charges imposed by the District have increased by an average of approximately 5.3% per Fiscal Year. The overall average rate increase, which includes the rate increases for all customer classes and rate components (including District treatment and disposal charges, wet weather facilities charges and San Francisco Bay Pollution Prevention Fee), over the same period was approximately 6.7%. The District's most recent increases in wastewater service rates and charges included the adoption on June 9, 2015 of overall rate increases of 5.00% and 5.00% for Fiscal Years 2016 and 2017, respectively. In Fiscal Year 2015, the District completed an updated cost of service study as a result of which certain adjustments were made to the treatment service charge, flow charge, strength charge and wet weather facilities charge components of the District's wastewater charges.

At a public hearing scheduled for July 11, 2017, the Board will consider for adoption proposed system-wide rate increases of 5.0% and 5.0% for Fiscal Years 2018 and 2019, respectively.

Table 6 sets forth a history of the average residential rate increases and overall average rate increases for all customers enacted by the District for Fiscal Years 2013 through 2017 and the proposed average residential and overall average rate increases for all customers for Fiscal Years 2018 and 2019.

**Table 6**  
**HISTORY OF WASTEWATER**  
**RATE INCREASES<sup>(1)</sup>**

<i><b>Fiscal Year</b></i>	<i><b>Average Residential Rate Increase</b></i>	<i><b>Overall Average Rate Increase<sup>(1)</sup></b></i>
2013	5.93%	6.00%
2014	8.24	9.00
2015	8.29	8.50
2016 <sup>(2)</sup>	(0.81) <sup>(2)</sup>	5.00 <sup>(2)</sup>
2017 <sup>(3)</sup>	4.88 <sup>(3)</sup>	5.00 <sup>(3)</sup>
Proposed 2018 <sup>(4)</sup>	4.82 <sup>(4)</sup>	5.00 <sup>(4)</sup>
Proposed 2019 <sup>(4)</sup>	5.07 <sup>(4)</sup>	5.00 <sup>(4)</sup>

<sup>(1)</sup> Overall average rate increase includes wastewater treatment and disposal charges, wet weather facilities charges and San Francisco Bay Pollution Prevention Fees.

<sup>(2)</sup> Fiscal Year 2016 rate increase is subsequent to cost of service adjustments. As a result of certain adjustments to individual wastewater component charges for wastewater flow, strength, inflow and infiltration designed to implement the results of the updated cost of service study completed by the District, different rate increases are applicable for each customer class and individual customers within each customer class depending on wastewater flow and strength and by parcel size.

<sup>(3)</sup> Adopted overall average rate increase that took effect on bills issued on and after July 1, 2016.

<sup>(4)</sup> A public hearing on the proposed rate increase for Fiscal Years 2018 and 2019 is scheduled for July 11, 2017 at which time the Board will consider the proposed Fiscal Year 2018 and 2019 rate increases for adoption. If adopted, the proposed rate increase for Fiscal Year 2018 would be effective on bills issued on or after July 12, 2017 and the proposed rate increase for Fiscal Year 2019 would be effective on bills issued on or after July 1, 2018.

Source: The District.

The District's current (Fiscal Year 2017) wastewater rates are set forth Table 7. The District believes that the current rate structure is consistent with federal and State regulations, which require generally that wastewater charges be proportionate to the operation, maintenance and replacement costs associated with providing service for each discharger or class of dischargers. See also Table 16 under "Projected Operating Results" for a description of projected future rate increases.

**Table 7**  
**WASTEWATER SYSTEM RATES AND CHARGES**  
**Effective July 1, 2016 and Proposed July 12, 2017**

	<i>Effective July 1, 2016</i>	<i>Proposed July 12, 2017</i>	
<b>Residential Charge:</b>			
Service Charge (per account)	\$ 5.55	\$ 5.83	per month
Strength Charge (per dwelling unit)	7.64	8.02	per month
Flow Charge	1.09	1.14	per 100-cubic foot unit, to a maximum of 9 units
San Francisco Bay Pollution Prevention Fee	0.20	0.20	per month per dwelling unit
<b>Non-Residential Charge:</b>			
Service Charge (per meter)	5.55	5.83	per month
Treatment Charge	1.24-14.50	1.29-15.22	per unit, depending on the nature of the business
San Francisco Bay Pollution Prevention Fee	5.48	5.48	per month
<b>Minimum Monthly Charge:</b>			
Duplex	20.83	21.87	per month
Triplex	28.47	29.89	per month
<b>Permit Accounts:</b>			
Flow Charge	1.085	1.139	per hundred cubic feet
CODf	0.321	0.337	per pound of discharge
Suspended Solids	0.469	0.492	per pound of discharge
<b>Wet Weather Facilities Charge:</b>			
Small lot (0-5,000 sq. ft.)	94.10	98.80	per year per land parcel
Medium lot (5,001-10,000 sq. ft.)	147.00	154.34	per year per land parcel
Large lot (>10,000 sq. ft.)	336.00	352.80	per year per land parcel

Source: The District.

### **Comparison of Wastewater System Charges**

Annual charges of various Bay Area wastewater service providers for single family residences discharging 6.0 hundred cubic feet (“Ccf”) of wastewater per month (as determined based upon metered water consumption) are shown in Table 8. Charges for cities served by the District include both the cities’ charge for collection and the District charge for treatment and disposal. Charges for these cities include costs of sewer rehabilitation programs, now underway, to reduce wet weather infiltration and inflow into their collection systems. The District rates also reflect an additional wet weather facilities charge (based on lot size: proposed for Fiscal Year 2018 to be \$98.80 for lots from 0 to 5,000 square feet) to pay the cost of the wet weather program.

**Table 8**  
**COMPARATIVE ANNUAL WASTEWATER CHARGES<sup>(1)</sup>**  
**Single Family Residences 6.0 Ccf/Month**  
**Effective Rates as of July 1, 2017**

City and County of San Francisco	\$893
Central Marin Sanitary District	861
City of Richmond	771
<b>East Bay Municipal Utility District<sup>(2)(3)</sup></b>	<b>771</b>
City of Pinole	727
City of Livermore	540
Central Contra Costa Sanitary District <sup>(4)</sup>	538
City of Vallejo	537
West Contra Costa Sanitary District	519
Delta Diablo Sanitary District	469
City of Pleasanton	464
City of San Jose	427
City of San Leandro	408
Union Sanitary District	393
Dublin San Ramon Services District	382
Oro Loma Sanitary District	238

<sup>(1)</sup> Includes collection and treatment charges.

<sup>(2)</sup> Monthly charges vary by metered water consumption. The District portion of the charge assumes a monthly wastewater discharge of 6.0 Ccf for a proposed annual charge of \$349, based on proposed rates for Fiscal Year 2018 (including the \$98.80 wet weather facilities charge for small lots), plus an average community collection charge of \$422 per year throughout the wastewater service area.

<sup>(3)</sup> Proposed rate effective July 12, 2017.

<sup>(4)</sup> Proposed rate effective July 1, 2017.

Source: The District.

### **Wastewater User Charge Revenues and Number of Connections by User Type**

Table 9 sets forth a breakdown of the District's dry weather user charge revenues and number of connections by customer class for the Fiscal Year ended June 30, 2016.

**Table 9**  
**WASTEWATER DRY WEATHER USER CHARGE REVENUES**  
**AND NUMBER OF CONNECTIONS BY USER TYPE**  
**Fiscal Year ended June 30, 2016**

<i>Type of Customer</i>	<i>User Charge Revenues<sup>(1)</sup></i>	<i>Percent of Revenues</i>	<i>Number of Connections</i>	<i>Percent of Accounts</i>
Residential	\$36,275,341	55.0%	157,771	89.6%
Commercial	24,501,673	37.2	16,807	9.5
Industrial	1,890,311	2.9	698	0.4
Public	3,248,706	4.9	751	0.4
Total <sup>(2)</sup>	<u>\$65,916,031</u>	<u>100.0%</u>	<u>176,027</u>	<u>100.0%</u>

<sup>(1)</sup> Dry weather user charges collected on the water bill includes permit fees, pollution prevention fees and late fees. Does not include wet weather facilities charges, resource recovery treatment fees or private sewer lateral compliance certificate fees.

<sup>(2)</sup> Totals may not add due to rounding.

Source: The District.

## Billing and Collections

All wastewater service customers are billed by the District bimonthly for dry weather user charges, with the exception of the 450 largest accounts, which are billed monthly. Billing is staggered throughout the billing cycle by geographic location. Water service may be discontinued if an overdue wastewater account is not paid after appropriate customer notification.

The District considers its rates of payment delinquency, service discontinuance for non-payment and write-offs for uncollectible accounts to be low by wastewater industry standards for urban areas. Following retention of a new collection vendor and implementation of a new delinquent payment process, write-offs for uncollectible revenues have been further reduced. Write-offs for uncollectible accounts for the last five Fiscal Years are set forth in Table 10.

**Table 10**  
**WASTEWATER CHARGES UNCOLLECTIBLE REVENUES**  
**Last Five Fiscal Years**

<i>Fiscal Year Ended June 30</i>	<i>Uncollectible Revenues</i>	<i>Percent of Gross Billings</i>
2012	\$414,605	0.57%
2013	479,215	0.63
2014	363,290	0.45
2015	272,758	0.42
2016	193,404	0.29

Source: The District.

As described above, beginning in Fiscal Year 2016, wet weather facilities charges are assessed annually based on lot size. In prior years wet weather facilities charges were annual per dwelling unit per parcel charges. Wet weather facilities charges are collected by Alameda and Contra Costa County on the property tax bill and remitted to the District. Unpaid charges may become a lien on the property.

## Wastewater Capacity Fees

The District assesses a Wastewater Capacity Fee on each new Wastewater System customer or each existing Wastewater System customer that increases demand for treatment processing on or after July 1, 1984, measured in wastewater volume and strength. The Wastewater Capacity Fee is a one-time charge based on the maximum monthly wastewater volume and average strength. In 2013, the Board approved a change in the Wastewater Capacity Fee calculations. These changes were made in order to address the recognition that the District's ultimate build-out scenario now projects lesser demand growth than previously assumed. This change resulted in a 60% increase in the calculated Wastewater Capacity Fee, which is being phased-in over five years beginning in Fiscal Year 2014. In Fiscal Year 2016, the Wastewater Capacity Fee for a single family residence was \$1,860. The fees for 2-4 units were \$1,860 times the number of dwelling units. For Fiscal Year 2017, the Wastewater Capacity Fee for single family residence increased to \$2,150. The fees for 2-4 units are \$2,150 times the number of dwelling units. The Wastewater Capacity Fee for other applicants is based on an analysis of the applicant's expected wastewater treatment needs.

## Resource Recovery Revenues

As described under “THE WASTEWATER SYSTEM – Resource Recovery,” the District accepts truck waste from outside its Wastewater System service area for disposal at the Main Wastewater Treatment Plant through its resource recovery program. Waste generators interested in disposing of trucked waste at the District’s facilities are required to obtain a permit from the District (either directly or by utilizing an approved hauler possessing a District permit). Tipping fees are charged by the District for waste streams delivered by truck for disposal based upon type of waste and volume or weight. Types of customers include chicken processors, dairies, wineries, breweries, and industrial wastewater brokers and haulers. The District has approximately 190 permit holders bringing in both regular deliveries such as chicken blood or dairy brine and one time projects from industrial facility clean-outs.

In Fiscal Year 2016, total resource recovery programs revenues received by the District from tipping fees totaled \$11.6 million. For budgeting purposes, the District assumes resource recovery program revenues will be less in future years than currently generated due to increased competition from wastewater facilities that are beginning trucked waste acceptance programs that will be located closer to waste generators.

## Property Tax Revenues

The District’s share of the countywide 1% *ad valorem* property tax levy allocated to Special District No. 1 has provided approximately 4% to 5% of the revenues of the Wastewater System in each of the past five Fiscal Years for the District. The District’s share of the countywide 1% *ad valorem* property tax levy allocated to Special District No. 1 is not pledged as a source of payment for the Wastewater System Revenue Bonds, although such amounts are applied to pay Wastewater Operation and Maintenance Costs in accordance with the Indenture. Beginning in Fiscal Year 1995-96, the District exercised the authority to impose an additional *ad valorem* tax levy to pay debt service on its outstanding Wastewater System general obligation bonds.

Table 11 shows a five-year record of assessed valuations, secured roll levies and delinquencies for the taxable property included within Special District No. 1. Assessed valuations are expressed by county assessors as “full cash value” as defined by Article XIII A of the State Constitution. The tax levy shown includes both the District’s allocated share of the maximum *ad valorem* tax levy by each county of 1% of full cash value and the *ad valorem* tax levy imposed to pay debt service on the District’s outstanding Wastewater System general obligation bonds.

Pursuant to California Revenue and Taxation Code Sections 4701 *et seq.*, Contra Costa County and Alameda County each maintain a reserve fund for the purpose of guaranteeing 100% of the secured levies of the electing governmental jurisdictions for which such county collects taxes (commonly referred to as the “Teeter Plan”). The District has elected to participate in Contra Costa County’s Teeter Plan program but has elected not to participate in Alameda County’s Teeter Plan program. Consequently, the District is exposed to the effect of delinquencies in collections only for property located in Alameda County.

A Teeter Plan remains in effect unless the board of supervisors of the county that has established a Teeter Plan orders its discontinuance or unless, prior to the commencement of any fiscal year of such county, such board of supervisors receives a petition for its discontinuance joined in by a resolution adopted by at least two-thirds of the participating revenue districts within the county, in which event the such board of supervisors is to order the discontinuance of the Teeter Plan effective at the commencement of the subsequent fiscal year. If the Board of Supervisors of the Contra Costa County, or in the event that the District elects to participate in Alameda County’s Teeter Plan, the Board of Supervisors of Alameda

County, is to order the discontinuance of the Teeter Plan, only those secured property taxes actually collected would be allocated to political subdivisions (including the District) for which such county acts as the tax-levying or tax-collecting agency.

**Table 11**  
**TAXABLE PROPERTY WITHIN THE WASTEWATER SYSTEM**  
**Assessed Valuation and Tax Collection Record**

	<i>Fiscal Year Ending June 30</i>				
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
Assessed Valuation for Taxation Purposes <sup>(1)(2)</sup>					
Alameda County	\$71,934,582,382	\$75,005,826,233	\$79,134,556,452	\$85,882,609,820	\$91,776,237,397
Contra Costa County	<u>4,216,260,569</u>	<u>4,436,844,975</u>	<u>4,842,733,668</u>	<u>5,290,848,742</u>	<u>5,674,452,805</u>
Total	\$76,150,842,951	\$79,442,671,208	\$83,977,290,120	\$91,173,458,562	\$97,450,690,202
Secured Roll Tax Levy <sup>(3)</sup>					
Alameda County	\$ 7,747,832	\$ 8,824,314	\$ 8,611,620	\$ 7,910,988	\$ 7,400,912
Contra Costa County	<u>558,780</u>	<u>583,897</u>	<u>1,269,429</u>	<u>557,382</u>	<u>537,689</u>
Total	\$ 8,306,612	\$ 9,408,211	\$ 9,881,049	\$ 8,468,370	\$ 7,938,601
Delinquent June 30 <sup>(4)</sup>					
Amount	\$ 214,184	\$ 172,212	\$ 143,118	\$ 109,278	\$ 112,750
Percent	2.58%	1.83%	1.45%	1.27%	1.42%

(1) Net of all exemptions except homeowner's exemptions, the taxes on which are paid by the State. All valuations are stated on a 100% of full cash value basis as defined by law. Assessed valuations shown include redevelopment project area incremental valuations.

(2) Minor differences in assessed valuation numbers from amounts previously reported can occur from time to time due to a change in source data used.

(3) Net basis excluding all exemptions. Levies reflect the tax reductions effected by the adoption of Article XIII A of the State Constitution in 1978, the "Jarvis-Gann Initiative." Includes *ad valorem* tax levied for repayment of Special District No. 1's general obligation bonds. For Alameda County, receipts include the District's share of prior years' delinquencies when collected.

(4) Amounts apply to Alameda County only, since Contra Costa County guarantees 100% payment of the District's secured roll levy. The delinquency percentages are based on the two counties' secured roll levies.

Sources: Auditor-Controller's Office, Alameda and Contra Costa Counties, as compiled by the District.

Historically, from time to time, legislation was enacted as part of the State budget to provide for the reallocation of local governments' shares of the countywide 1% *ad valorem* tax, including by shifting a portion of the property tax revenues collected by the counties from special districts (such as the District) to school districts or other governmental entities. Subsequently, certain amendments to the State Constitution have been enacted to reduce the State Legislature's authority over local revenue sources by placing restrictions on, among other things, the State's access to local governments' property tax revenues. For example, on November 2, 2004 voters within the State approved Proposition 1A, which prevented the State from reducing local government's share of the 1% *ad valorem* property tax below levels in effect as of November 3, 2004, except in the case of fiscal emergency. Proposition 1A provided that in the case of fiscal emergency, the State could borrow up to 8% of local property tax revenues to be repaid within three years. Following the exercise by the State of its authority to borrow such local property tax revenues as part of the 2009-10 State budget act, on November 2, 2010, voters within the State approved Proposition 22, which prohibits any future action by the State Legislature to take, reallocate or borrow money raised by local governments for local purposes, and prohibits changes in the allocation of property taxes among local governments to aid State finances or pay for State mandates. Proposition 22 thereby effectively repealed the provisions of Proposition 1A allowing the State to borrow local property tax revenues from local governments, and prohibits any such future borrowing.

There can be no assurances that legislation or voter initiatives enacted or approved in the future will not reduce or eliminate the District's share of the 1% countywide *ad valorem* property tax revenues. See also "CONSTITUTIONAL AND STATUTORY LIMITATIONS ON TAXES AND APPROPRIATIONS" in the front part of this Official Statement.

The tax rolls for property located within the District's Wastewater System service area for the Fiscal Year ended June 30, 2016, aggregated a total assessed valuation of approximately \$97.5 billion, including redevelopment project areas incremental valuations of which the taxes payable were due to the redevelopment agency. In 2011, the State enacted legislation commonly referred to as "AB1X 26," which required the dissolution of California redevelopment agencies and the dissolution and winding up of the operations of those agencies, which dissolution occurred on February 1, 2012. AB1X 26 provides a framework for the management of the remaining obligations of the dissolved redevelopment agencies by their respective successor agencies and oversight boards to oversee those successor agencies. Pursuant to AB1X 26, tax increment will continue to flow to the payment of "enforceable obligations" (such as tax allocation bonds) of the dissolved redevelopment agencies.

### **Grants and Reimbursements**

The District periodically receives grants for specific projects. In addition, the District from time to time receives certain reimbursements for capital costs, primarily in connection with facility relocations. In Fiscal Year 2016, the District collected approximately \$324,000 in grants and reimbursements for the Wastewater System. Approximately \$200,000 in grants and reimbursements is estimated to be received by the District in Fiscal Year 2017. Grant receipts and facility relocation reimbursements budgeted for Fiscal Years 2018 and 2019 are \$100,000 and \$100,000, respectively. Grants and facility relocation reimbursements received are treated as capital contributions and are not included in Subordinated Wastewater Revenues for purposes of the Indenture.

### **Operation and Maintenance Costs**

The primary component of the District's Wastewater System Operation and Maintenance Costs is labor costs, including wages, salaries and benefits. Operation and Maintenance Costs also include materials, supplies and services such as treatment chemicals and sludge disposal costs, and other general and administrative expenses.

### **Outstanding Debt**

Table 12 shows Wastewater System debt outstanding as of May 1, 2017. As provided in the Municipal Utility District Act, prior to the exercise by the District of its power to issue Wastewater System revenue bonds, a preliminary resolution is adopted by the Board declaring its intention to authorize the issuance of revenue bonds and specifying, among other things, the maximum principal amount of bonds then proposed to be issued (excluding refunding bonds) pursuant to such resolution. As of May 1, 2017 (and prior to the issuance of the Series 2017 Bonds), the District has \$204,360,000 of authorized but unissued Wastewater System revenue bonds, including (i) \$4,360,000 of remaining authorized but unissued Wastewater System revenue bonds under Resolution No. 33607-07 adopted on June 12, 2007, pursuant to which the Board declared its intention to authorize the issuance of up to \$100,000,000 of Wastewater System revenue bonds, from time to time in one or more series, and (ii) \$200,000,000 of authorized but unissued Wastewater System revenue bonds under Resolution No. 33781-10 adopted on September 14, 2010, pursuant to which the Board declared its intention to authorize the issuance of up to \$200,000,000 of Wastewater System revenue bonds, from time to time in one or more series. The issuance of revenue bonds by the District is not subject to prior voter approval, although such resolutions of intention to authorize the issuance of bonds are subject to a 60-day

referendum period (which, with respect to Resolution Nos. 33607-07 and 33781-10, expired without challenge). The District may from time to time in the future adopt other resolutions authorizing the issuance of additional Wastewater System Revenue Bonds, subject to the satisfaction of the conditions set forth in the Indenture. See “SECURITY FOR THE SERIES 2017A BONDS – Issuance of Additional Wastewater System Revenue Bonds and Parity Debt; Junior and Subordinate Obligations” in the front part of this Official Statement.

From time to time, the District applies for and is granted loan funds from the SWRCB under the Clean Water State Revolving Fund loan program. The SWRCB loans (“State Loans”) are low-interest loans made by the SWRCB to fund various water quality infrastructure projects. The District may in the future apply for additional State Loans. The SWRCB requires all future debt issued by agencies involved in loan contracts under the Clean Water State Revolving Fund loan program to be issued on a parity with or subordinate to the State Loans. The District currently has no outstanding State Loans for the Wastewater System. Any future State Loans would likely constitute Parity Debt under the Indenture.

Pursuant to the authority of the Municipal Utility District Act, the Board has declared its intention to authorize the issuance of short-term indebtedness of the District (which may include commercial paper notes and/or other forms of bonds, notes or other evidences of short-term indebtedness, including bank credit) in a maximum outstanding principal amount not exceeding the lesser of (1) the annual average of the District’s total revenue for the three preceding years or (2) 25% of the District’s total outstanding bonds issued pursuant to Chapters 6, 7 and 8 of the Municipal Utility District Act. The District has determined the maximum authorized principal amount of short-term indebtedness (including short-term indebtedness of the Water System and the Wastewater System) pursuant to the above limit to be an amount not to exceed \$554,000,000 as of June 30, 2016. The District currently maintains two commercial paper note programs for the benefit of the Wastewater System and the District’s Water System. Under the extendable municipal commercial paper program, commercial paper may be issued for the Wastewater System or the Water System at prevailing interest rates for periods of not more than 120 days from the date of issuance with the option by the District to extend the maturity for another 150 days. The extendable municipal commercial paper program is not supported by any liquidity or revolving credit agreement. Under the District’s traditional commercial paper program, commercial paper notes may be issued for the Wastewater System or the Water System at prevailing interest rates for periods of not more than 270 days from the date of issuance. In connection with its traditional commercial paper program, the District has covenanted to procure and maintain in effect for any series or subseries of commercial paper notes issued thereunder one or more liquidity facilities enabling it to borrow an aggregate amount at least equal to the principal amount of such series or subseries of commercial paper notes. As of May 1, 2017, the District had outstanding \$374,800,000 principal amount of commercial paper notes, including \$15,000,000 of Tax-exempt Extendable Municipal Commercial Paper Notes (Wastewater Series) (“Wastewater System CP Notes”) issued under the District’s extendable municipal commercial paper program. As of May 1, 2017, the District had no Commercial Paper Notes (Wastewater Series) issued under the District’s traditional commercial paper program. The Wastewater System CP Notes, together with any additional commercial paper notes issued by the District for the benefit of the Wastewater System under either the District’s extendable municipal commercial paper program or its traditional commercial paper program (and the District’s repayment obligation for amounts borrowed, if any, under any applicable liquidity facility therefor), are payable from and secured by a pledge of Wastewater Revenues on a basis subordinate to the Wastewater System Revenue Bonds and Parity Debt.

The General Obligation Wastewater Pollution Control Bonds were authorized by voters in November 1970. All of the \$60,000,000 Wastewater Pollution Control Bonds (the “General Obligation Bonds”) that were authorized have been issued. The General Obligation Bonds are secured by the power and obligation of the District to levy *ad valorem* taxes upon property within the District’s Special District No. 1, subject to taxation therefor, without limitation of rate or amount.

**Table 12**  
**OUTSTANDING WASTEWATER SYSTEM DEBT**  
**As of May 1, 2017**

	<i>Date of Issue</i>	<i>Last Maturity</i>	<i>Amount Issued</i>	<i>Outstanding May 1, 2017</i>
<u>Wastewater System Revenue Bonds:</u>				
Revenue Refunding Bonds, Series 2007B <sup>(1)</sup>	06/06/07	06/01/26	\$ 46,670,000	\$ 26,920,000
Revenue/Refunding Bonds, Series 2010A <sup>(2)</sup>	10/20/10	06/01/29	58,095,000	44,295,000
Revenue Bonds, Series 2010B	10/20/10	06/01/40	150,000,000	150,000,000
Revenue Refunding Bonds, Series 2012A	10/10/12	06/01/37	20,000,000	20,000,000
Revenue Refunding Bonds, Series 2014A	08/28/14	06/01/31	82,150,000	76,310,000
Revenue Refunding Bonds, Series 2015A	03/03/15	06/01/38	68,370,000	68,370,000
Revenue Refunding Bonds, Series 2015B	03/03/15	06/01/30	<u>2,795,000</u>	<u>2,635,000</u>
Total Wastewater System Revenue Bonds			\$428,080,000	\$388,530,000
<u>Subordinate Debt:</u>				
Commercial Paper Notes (Wastewater Series)	Various	Various	15,000,000 <sup>(3)</sup>	15,000,000
<u>General Obligation Bonds:</u>				
Refunding Series G	02/27/14	04/01/18	<u>14,160,000</u>	<u>7,345,000</u>
<b>Total Debt</b>			<b><u>\$457,240,000</u></b>	<b><u>\$410,875,000</u></b>

<sup>(1)</sup> The Series 2007B Bonds remaining outstanding are being refunded in connection with the issuance of the Series 2017A Bonds. See "PLAN OF FINANCE" in the front part of this Official Statement.

<sup>(2)</sup> \$31,400,000 of the outstanding principal amount of the Series 2010A Bonds is being refunded in connection with the issuance of the Series 2017A Bonds. See "PLAN OF FINANCE" in the front part of this Official Statement.

<sup>(3)</sup> Commercial paper notes may be issued in an amount up to the statutory limit described above.

Source: The District.

### Debt Service Requirements

Table 13 shows future payments on outstanding debt.

**Table 13**  
**WASTEWATER SYSTEM ESTIMATED DEBT SERVICE<sup>(1)</sup>**

<i>Fiscal Year Ending June 30</i>	<i>Wastewater System Revenue Bonds – Series 2010A Through Series 2015B<sup>(2)</sup></i>			<i>Series 2017A Bonds</i>			<i>Wastewater System CP Notes<sup>(4)</sup></i>	<i>General Obligation Bonds<sup>(5)</sup></i>	<i>Total Debt Service<sup>(6)</sup></i>
	<i>Principal</i>	<i>Interest<sup>(3)</sup></i>	<i>Total</i>	<i>Principal</i>	<i>Interest</i>	<i>Total</i>			
2017	\$ 9,825,000	\$ 19,274,228	\$ 29,099,228	--	--	--	\$ 75,000	\$4,126,950	\$ 33,301,178
2018	7,145,000	15,990,348	23,135,348	\$ 2,890,000	\$ 3,183,339	\$ 6,073,339	375,000	3,620,450	33,204,137
2019	7,415,000	15,733,773	23,148,773	2,955,000	3,158,100	6,113,100	375,000	--	29,636,873
2020	8,950,000	15,393,958	24,343,958	1,910,000	3,010,350	4,920,350	450,000	--	29,714,308
2021	6,595,000	15,004,988	21,599,988	4,360,000	2,914,850	7,274,850	450,000	--	29,324,838
2022	6,985,000	14,679,613	21,664,613	4,495,000	2,696,850	7,191,850	450,000	--	29,306,463
2023	7,275,000	14,334,863	21,609,863	4,735,000	2,472,100	7,207,100	450,000	--	29,266,963
2024	7,600,000	13,975,073	21,575,073	4,975,000	2,235,350	7,210,350	450,000	--	29,235,423
2025	7,935,000	13,599,143	21,534,143	5,220,000	1,986,600	7,206,600	450,000	--	29,190,743
2026	8,265,000	13,206,683	21,471,683	5,495,000	1,725,600	7,220,600	450,000	--	29,142,283
2027	9,200,000	12,796,733	21,996,733	5,020,000	1,450,850	6,470,850	450,000	--	28,917,583
2028	4,400,000	12,340,115	16,740,115	10,525,000	1,199,850	11,724,850	450,000	--	28,914,965
2029	14,610,000	12,123,580	26,733,580	1,060,000	673,600	1,733,600	450,000	--	28,917,180
2030	15,750,000	11,394,114	27,144,114	695,000	631,200	1,326,200	450,000	--	28,920,314
2031	16,305,000	10,607,489	26,912,489	950,000	603,400	1,553,400	450,000	--	28,915,889
2032	16,795,000	9,789,252	26,584,252	1,320,000	565,400	1,885,400	450,000	--	28,919,652
2033	17,620,000	8,946,369	26,566,369	1,390,000	512,600	1,902,600	450,000	--	28,918,969
2034	18,505,000	8,055,736	26,560,736	1,450,000	457,000	1,907,000	450,000	--	28,917,736
2035	19,410,000	7,123,209	26,533,209	1,535,000	399,000	1,934,000	450,000	--	28,917,209
2036	20,360,000	6,145,044	26,505,044	1,625,000	337,600	1,962,600	450,000	--	28,917,644
2037	21,345,000	5,118,983	26,463,983	1,730,000	272,600	2,002,600	450,000	--	28,916,583
2038	24,365,000	4,043,250	28,408,250	--	203,400	203,400	450,000	--	29,061,650
2039	26,250,000	2,787,794	29,037,794	--	203,400	203,400	450,000	--	29,691,194
2040	27,610,000	1,429,094	29,039,094	--	203,400	203,400	450,000	--	29,692,494
2041	--	--	--	940,000	203,400	1,143,400	450,000	--	1,593,400
2042	--	--	--	975,000	165,800	1,140,800	450,000	--	1,590,800
2043	--	--	--	1,015,000	126,800	1,141,800	450,000	--	1,591,800
2044	--	--	--	1,055,000	86,200	1,141,200	450,000	--	1,591,200
2045	--	--	--	1,100,000	44,000	1,144,000	450,000	--	1,594,000
Total <sup>(6)</sup>	<u>\$330,515,000</u>	<u>\$263,83,426</u>	<u>\$594,408,426</u>	<u>\$69,420,000</u>	<u>\$31,722,639</u>	<u>\$101,142,639</u>	<u>\$12,525,000</u>	<u>\$7,747,400</u>	<u>\$715,823,466</u>

(1) Debt service is calculated on a cash basis.

(2) Excludes Refunded Bonds after the date of issuance of the Series 2017A Bonds.

(3) Includes gross interest payable before application of any cash subsidy received by the District from the United States Treasury relating to the Series 2010B Bonds ("BABs Interest Subsidy Payments"). Upon the issuance of the Series 2017A Bonds and the effective date of the amendments to the Indenture pursuant to the Thirteenth Supplemental Indenture, the BABs Interest Subsidy Payments reasonably expected to be received by the District will be treated as an offset to debt service on the Series 2010B Bonds for purposes of the Indenture. See "SECURITY FOR THE 2017A BONDS – General – *Amendments to the Indenture*" in the front part of this Official Statement.

(4) Assumes \$15,000,000 outstanding at assumed interest rate of 0.50% in Fiscal Year 2017, 2.50% in Fiscal Years 2018 and 2019, and 3.00% thereafter. Includes interest only (no principal amortization). While the commercial paper program is limited by statute to seven years, it is the District's intention to reestablish the commercial paper program after each seven-year period. The District may increase the amount of the commercial paper program in the future subject to the limit described herein.

(5) General obligation bonds are paid from *ad valorem* property taxes levied for such purpose, not Wastewater Revenues.

(6) Totals may not add due to rounding.

Source: The District.

## **Financial Management Policies**

The District has detailed management policies that include guidelines for debt, capital planning, investments, derivatives, and formal reserves. It is the current policy of the District to seek to maintain a debt service coverage ratio of 1.6 times on its outstanding Wastewater System Revenue Bonds and to fund no more than 65% of its capital program over each five-year planning period from proceeds of debt. The debt policy also limits unhedged variable rate debt to 25% of the total debt portfolio. Derivatives use is governed by a comprehensive derivatives policy with guidelines for counterparties, termination, and risk exposure. The District budgets for a number of formal reserves for the Wastewater System, including: (i) a working capital reserve equal to three months of operation and maintenance expenses; (ii) a self-insurance reserve equal to 1.25 times the expected annual expenditure; (iii) a workers' compensation reserve of approximately \$0.6 million in Fiscal Year 2016; and (iv) a contingency/rate stabilization reserve (which is included in the Rate Stabilization Fund) of at least 5% of operating and maintenance expenses. The aggregate budgeted reserves level for Fiscal Year 2016 for these four formal reserves for the Wastewater System was approximately \$42.8 million, which amount the District maintained in accordance with its reserve policies. The current investment policy dictates investment criteria, reporting, and administrative requirements.

### **District Investment Policy**

Funds of the District are invested in accordance with the Government Code of the State, the Municipal Utility District Act and the District's investment policy. The four primary investment criteria set forth in the District's written investment policy are (in order of priority): (1) preservation of principal; (2) maintenance of liquidity; (3) yield; and (4) diversity. In order to keep funds available to meet commitments, the District's investment policy provides that the maturity date (or put provision) of individual investments shall not exceed five years and that the average maturity of the portfolio shall not exceed 720 days. Investments permitted by the District's current investment policy include U.S. Treasury notes, bonds and bills, the State of California Local Agency Investment Fund, obligations issued by federal agencies and commercial paper rated in the highest short-term rating category, as well as collateralized repurchase agreements, certificates of time deposit and negotiable certificates of deposit, medium term corporate notes, California municipal bonds, and the California Asset Management Program. Monies in the funds and accounts held by the Trustee under the Indenture may be invested only in Investment Securities, as defined therein. The District does not enter into reverse repurchase agreements or otherwise borrow for purposes of investing, and the District does not invest in derivatives. The District has, however, entered into interest rate swap transactions to hedge interest rate exposure on outstanding variable rate Water System Revenue Bonds as described herein.

Pursuant to the District's investment policy, all securities purchased from dealers and brokers are held in safekeeping by the trust department of a state or national bank on a payment vs. delivery basis. Collateral is delivered or assigned under a tri-party agreement for all repurchase agreements. Trade confirmations are reviewed for conformity to the original transaction by an individual other than the one who originated the transaction. Transactions are ratified by the General Manager and reported quarterly to the Finance/Administration Committee of the Board.

## Cash and Investments

The District's cash and investments are segregated by restricted and unrestricted amounts. Restricted cash and investments generally include bond proceeds and debt service reserve funds, developer advances and capital contributions, and other miscellaneous restricted amounts. At June 30, 2016, the breakdown between restricted and unrestricted amounts for the Wastewater System is as follows:

**Table 14**  
**WASTEWATER SYSTEM**  
**CASH AND INVESTMENTS**  
**(Thousands)**

Cash and investments included in current and unrestricted assets	\$86,983
Cash and investments included in restricted assets	<u>18</u>
Total cash and investments	<u>\$87,001</u>

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Source: The District.

See also “– *Cash and Investments by Fund*” in the Management's Discussion and Analysis included in APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015.” Additional information regarding the District's investment portfolio may also be found in Note 2 in the District's financial statements included in APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015.”

## Insurance

The District uses a combination of self-funding/self-insuring and insurance coverage in the District's risk management program. The program provides protection for the District's buildings and facilities, including their contents and equipment, from fire, explosion and related perils, including flood. The District's insurance program does not currently include earthquake coverage. The District self-insures for liability claims up to \$10 million for bodily injury and property damage that may arise from the District's water and wastewater operations, including but not limited to use of its property, facilities or vehicles.

The District maintains a reserve of approximately \$10 million that is earmarked to pay both liability and workers' compensation claims that may arise from the District's water and wastewater systems' operations. See also – Financial Management Policies” above.

Selected insurance coverages include the following:

- \$90 million of commercial general and automobile liability insurance, subject to a \$10 million per occurrence self-insured retention for both the Water System and the Wastewater System;
- Statutory limits of excess workers' compensation coverage, subject to a \$5 million self-insured retention for both the Water System and the Wastewater System;
- \$200 million in coverage for “all risk” property insurance, subject to a \$500,000 deductible, with exclusions including, but not limited to, earthquake, dams, reservoirs, under- and above-ground pipes and aqueducts;

- \$25 million per occurrence/annual aggregate in coverage for flood perils, subject to a \$1.5 million minimum deductible per occurrence/annual aggregate, with the same exclusions as under the “all risk” policy described above other than above-ground aqueducts for which \$2.5 million in coverage is provided; the policy also provides a flood sublimit of \$10 million per occurrence/annual aggregate for losses wholly or partially within the areas of 100-year flooding as defined by FEMA with a deductible of 5% of the total insurable property values at the time of the loss at each location involved in the loss or a minimum deductible of \$1.5 million;
- \$10 million in coverage for boiler and machinery insurance, subject to a \$25,000 deductible (except for Pardee Dam, Camanche Dam and the Main Wastewater Treatment Plant, for which a \$50,000 deductible applies); and
- \$10 million in coverage for crime insurance for protection against fraudulent acts of employees, subject to a \$25,000 deductible.

### **Historical Operating Results**

The District’s financial statements for Fiscal Year 2016, and the Report of Maze & Associates, independent accountants, are included as Appendix B, and should be read in their entirety. The summary of operating results for Fiscal Years 2012 through 2016 contained in Table 15 is derived from information from the audited financial statements for such Fiscal Years and is qualified in its entirety by reference to such statements, including the notes thereto.

Table 15 sets forth the historical operating results and the calculation of the debt service coverage ratio for the Wastewater System for each of the last five Fiscal Years. The presentation below differs from that previously reported in that Wastewater Capacity Fees previously excluded are now reflected as a component of Wastewater Revenues for purposes of the coverage calculation as permitted by the Indenture.

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**Table 15**  
**WASTEWATER SYSTEM**  
**Historical Operating Results and Debt Service Coverage<sup>(1)</sup>**  
**Fiscal Years 2012 through 2016**

	2012	2013	2014	2015	2016
<b>WASTEWATER REVENUES<sup>(2)</sup></b>					
Dry Weather User Charges	\$55,191,460	\$58,783,692	\$61,774,568	\$ 65,107,788	\$65,916,031
Wet Weather Facilities Charges	17,228,380	18,320,550	19,388,979	21,809,317	21,918,034
Interest	856,218	368,315	223,672	271,736	359,743
Resource Recovery	9,061,029	9,226,468	10,570,194	11,309,181	11,625,497
Wastewater Capacity Fees	2,824,137	1,278,961	805,590	2,785,820	3,142,514
Other Revenue <sup>(3)</sup>	<u>3,507,474</u>	<u>4,061,513</u>	<u>6,315,048</u>	<u>5,558,340</u>	<u>5,168,719</u>
TOTAL WASTEWATER REVENUE	\$88,668,698	\$92,039,499	\$99,078,051	\$106,842,182	\$108,130,538
<b>RATE STABILIZATION FUND TRANSFERS</b>					
Deposits to the Rate Stabilization Fund	\$ 0	\$ 0	\$(2,590,000)	\$(6,500,000)	\$ 0
Withdrawals from Rate Stabilization Fund for Inclusion in Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
WASTEWATER REVENUES AFTER RATE STABILIZATION TRANSFER	<u>\$88,668,698</u>	<u>\$92,039,499</u>	<u>\$96,488,051</u>	<u>\$100,342,182</u>	<u>\$108,130,538</u>
<b>WASTEWATER OPERATION &amp; MAINTENANCE COSTS</b>					
Operating Expenses	\$52,482,539	\$51,435,631	\$55,318,873	\$ 55,336,812	\$ 55,331,260
(Less Tax Receipts) <sup>(4)</sup>	<u>(3,698,069)</u>	<u>(4,413,039)</u>	<u>(4,530,489)</u>	<u>(3,979,783)</u>	<u>(4,640,025)</u>
TOTAL WASTEWATER OPERATION & MAINTENANCE COSTS	<u>\$48,784,470</u>	<u>\$47,022,592</u>	<u>\$50,788,384</u>	<u>\$ 51,357,029</u>	<u>\$ 50,691,235</u>
<b>NET WASTEWATER REVENUES</b>	\$39,884,228	\$45,016,907	\$45,699,667	\$ 48,985,153	\$ 57,439,303
<b>PARITY DEBT SERVICE</b>					
Wastewater System Revenue Bonds <sup>(5)</sup>	\$26,385,738	\$28,284,129	\$28,559,257	\$ 27,976,848	\$ 29,068,988
Parity State Loans	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>TOTAL PARITY DEBT SERVICE</b>	<u>\$26,385,738</u>	<u>\$28,284,129</u>	<u>\$28,559,257</u>	<u>\$ 27,976,848</u>	<u>\$ 29,068,988</u>
<b>PARITY DEBT SERVICE COVERAGE</b>	<b>1.51</b>	<b>1.59</b>	<b>1.60</b>	<b>1.75</b>	<b>1.98</b>
<b>SUBORDINATE WASTEWATER SYSTEM DEBT SERVICE<sup>(6)</sup></b>	\$ 33,300	\$ 33,910	\$ 20,116	\$ 14,342	\$ 22,543
<b>TOTAL PARITY AND SUBORDINATE DEBT SERVICE</b>	\$26,419,038	\$28,318,039	\$28,579,373	\$ 27,991,190	\$ 29,091,531
<b>PARITY AND SUBORDINATE DEBT SERVICE COVERAGE</b>	<b>1.51</b>	<b>1.59</b>	<b>1.60</b>	<b>1.75</b>	<b>1.97</b>

<sup>(1)</sup> Calculated in accordance with the Indenture as footnoted.

<sup>(2)</sup> Wastewater Revenues exclude grant receipts, taxes and certain reimbursements.

<sup>(3)</sup> Other Revenues includes BABs Interest Subsidy Payments received in connection with Series 2010B Bonds. In Fiscal Years 2012 through 2016, Other Revenues also includes revenues received from the sale of energy to the utility grid of \$333,812, \$693,272, \$1,099,418, \$1,092,911 and \$1,246,360, respectively. See "THE WASTEWATER SYSTEM – Power Generation/Energy Recovery."

<sup>(4)</sup> Wastewater Operation and Maintenance Costs exclude those expenses paid from the share of the 1% countywide *ad valorem* tax levy allocated to Special District No. 1. Under current District policy, taxes are used to pay for operations allocable to storm water processing and infiltration/inflow processing.

<sup>(5)</sup> Includes net swap payments (which swaps have subsequently been terminated). Net of capitalized interest. Debt service on the Series 2010B Bonds is gross of the BABs Interest Subsidy Payments received by the District.

<sup>(6)</sup> Includes outstanding Wastewater System commercial paper notes. Includes interest only on commercial paper notes with no principal amortization.

Source: The District.

## **District Management's Discussion of Fiscal Year 2016 Operating Results**

Wastewater Revenues increased approximately \$1.3 million from \$106.8 million in Fiscal Year 2015 to \$108.1 million in Fiscal Year 2016, reflecting a stable customer base, supplemented by continued growth in resource recovery revenues. Other Revenue includes approximately \$2.5 million in interest subsidy in both Fiscal Years 2015 and 2016 received in connection with the District's Series 2010B Bonds (Build America Bonds). Operation and Maintenance Costs decreased from approximately \$51.3 million in Fiscal Year 2015 to \$50.6 million in Fiscal Year 2016, partially due to lower labor costs as a result of higher vacancies.

Net Wastewater Revenue increased from approximately \$49.0 million in Fiscal Year 2015 to \$57.4 million in Fiscal Year 2016. Net Wastewater Revenue in Fiscal Year 2015 reflects the deposit of \$6.5 million to the Rate Stabilization Fund reserves for such Fiscal Year.

Parity lien debt service coverage in Fiscal Year 2016 was approximately 1.98 times, above the District's policy level target of 1.60, and reflecting strong financial results. Debt service coverage in Fiscal Year 2016 shows a continuing increase from the prior four fiscal years' coverage levels of 1.51 times in Fiscal Year 2012, 1.59 times in Fiscal Year 2013, 1.60 times in Fiscal Year 2014, and 1.75 times in Fiscal Year 2015. In Fiscal Year 2011, in order to realize debt service savings, the District refinanced approximately \$17.5 million of its outstanding State Loans with Wastewater System Revenue Bonds. Although debt service costs were reduced as a result of such refinancing, the annual debt service cost of certain of these State Loans that were previously treated as subordinate debt was elevated to a parity lien position as a result of the refunding, negatively impacting the parity lien debt service coverage level and resulting in coverage below the District's policy target of 1.6 times in Fiscal Years 2012 and 2013. This impact was overcome in Fiscal Years 2014 and 2015 as a result of the strong financial results, allowing the District to attain a 1.6 times debt service coverage level, as well as make the \$2.6 million in Fiscal Year 2014 and \$6.5 million in Fiscal Year 2015 deposits to the Rate Stabilization Fund. The Rate Stabilization Fund deposit provides the District with a tool to maintain stable revenues and policy level coverage in future years.

See also "Management's Discussion and Analysis" contained in APPENDIX B – "EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015."

## **Projected Operating Results**

In the preparation of the projections in this section, the District has made certain assumptions with respect to conditions that may occur in the future. While the District believes these assumptions are reasonable for the purpose of the projections, they are dependent on future events, and actual conditions may differ from those assumed. To the extent actual future factors differ from those assumed by the District or provided to the District by others, the actual results will vary from those forecasted. This projected information has not been compiled, reviewed or examined by the District's independent accountants.

Table 16 sets forth the projected operating results and calculation of the debt service coverage ratios for the Wastewater System for the current and next five Fiscal Years. Projected results for Fiscal Year 2017 were originally developed in connection with the District's biennial budget for Fiscal Years 2015 and 2016, and were subsequently updated in connection with the District's semi-annual budget performance review to reflect actual results experienced through December 31, 2016 and expectations as of such date for the remainder of Fiscal Year 2017. Projected results for Fiscal Year 2018 through 2022 were developed in connection with the District's proposed biennial budget for Fiscal Years 2018 and 2019; they have not yet been approved by the Board. The District's proposed biennial budget and rate

increases for Fiscal Years 2018 and 2019 are scheduled for consideration for adoption by the Board on June 27, 2017. In the preparation of the projected operating results, the District has taken into account limited growth in the service area and the expectations for the future economic environment. See also “– Discussion of Projected Operating Results for Fiscal Year 2017” and “– Discussion of Budget Projections for Fiscal Years 2018 through 2022” below.

The projection period reflects the proposed overall rate increases of 5.0% and 5.0% for Fiscal Years 2018 and 2019, respectively. Annual rate increases of 4.0%, 4.0% and 4.0% are assumed for Fiscal Years 2020, 2021 and 2022, respectively. Any such rate increases will be subject to Board approval. Projected Operating Expenses incorporate salary and benefit expectations.

The District’s biennial budget for Fiscal Years 2016 and 2017 included a budget forecast for Fiscal Years 2016 through 2020 and rate increases for Fiscal Years 2016 and 2017. The biennial budget for Fiscal Years 2016 and 2017 was approved by the Board on June 9, 2015. The proposed biennial for Fiscal Years 2018 and 2019 includes a budget forecast of projected operating results covering the five Fiscal Years 2018 through 2022. The proposed biennial budget for Fiscal Years 2018 and 2019 was presented to the Board on April 11, 2017, and is scheduled for consideration for adoption by the Board on June 27, 2017. No assurance can be given that the proposed biennial budget for Fiscal Years 2018 and 2019 will be adopted in its current form.

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**Table 16**  
**WASTEWATER SYSTEM**  
**Projected Operating Results and Debt Service Coverage (Millions)**  
**Fiscal Years 2017 through 2022**

	Proposed FY 2018 and 2019 Budget Five-Year Financial Forecast					
	2017 <sup>(1)</sup>	2018 <sup>(2)</sup>	2019 <sup>(2)</sup>	2020 <sup>(2)</sup>	2021 <sup>(2)</sup>	2022 <sup>(2)</sup>
WASTEWATER REVENUES <sup>(3)</sup>						
Dry Weather User Charges <sup>(4)</sup>	\$ 70.0	\$ 73.3	\$ 76.9	\$ 80.6	\$ 83.8	\$ 87.8
Wet Weather Facilities Charges <sup>(4)</sup>	22.9	24.0	25.2	26.3	27.3	28.4
Interest Earnings <sup>(5)</sup>	0.6	1.5	1.5	1.9	2.1	2.2
Resource Recovery	11.0	8.0	8.0	8.5	8.5	8.5
Wastewater Capacity Fees	3.5	1.8	1.9	1.9	2.0	2.1
Other Revenue <sup>(6)</sup>	<u>5.4</u>	<u>5.7</u>	<u>5.7</u>	<u>5.7</u>	<u>5.7</u>	<u>5.7</u>
TOTAL WASTEWATER REVENUES	\$113.4	\$114.4	\$119.3	\$124.9	\$129.4	\$134.6
RATE STABILIZATION FUND TRANSFERS						
Deposits to the Rate Stabilization Fund	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
Withdrawals from Rate Stabilization Fund for Inclusion in revenues	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
WASTEWATER REVENUES AFTER RATE STABILIZATION TRANSFER	<u>\$113.4</u>	<u>\$114.4</u>	<u>\$119.3</u>	<u>\$124.9</u>	<u>\$129.4</u>	<u>\$134.6</u>
WASTEWATER OPERATION & MAINTENANCE COSTS						
Operating Expense <sup>(7)</sup>	\$ 62.0	\$ 65.0	\$ 67.4	\$ 69.6	\$ 72.1	\$ 74.4
(Less Tax Receipts) <sup>(8)</sup>	<u>(4.2)</u>	<u>(4.8)</u>	<u>(4.9)</u>	<u>(5.1)</u>	<u>(5.2)</u>	<u>(5.3)</u>
TOTAL WASTEWATER OPERATION & MAINTENANCE COSTS	<u>\$ 57.3</u>	<u>\$ 60.2</u>	<u>\$ 62.5</u>	<u>\$ 64.5</u>	<u>\$ 66.9</u>	<u>\$ 69.2</u>
NET WASTEWATER REVENUES	\$ 56.1	\$ 54.2	\$ 56.7	\$ 60.4	\$ 62.5	\$ 65.5
DEBT SERVICE						
Wastewater System Revenue Bonds <sup>(9)</sup>	<u>\$ 29.1</u>	<u>\$ 30.5</u>	<u>\$ 31.4</u>	<u>\$ 32.3</u>	<u>\$ 33.1</u>	<u>\$ 33.4</u>
TOTAL PARITY DEBT SERVICE	\$ 29.1	\$ 30.5	\$ 31.4	\$ 32.3	\$ 33.1	\$ 33.4
PARITY DEBT SERVICE COVERAGE	1.93	1.78	1.81	1.87	1.89	1.96
SUBORDINATE WASTEWATER SYSTEM CP NOTES DEBT SERVICE <sup>(10)</sup>	<u>0.1</u>	<u>0.4</u>	<u>0.4</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>
TOTAL PARITY AND SUBORDINATE DEBT SERVICE	\$ 29.2	\$ 30.8	\$ 31.7	\$ 32.7	\$ 33.6	\$ 33.9
PARITY AND SUBORDINATE DEBT SERVICE COVERAGE	1.92	1.76	1.79	1.84	1.86	1.93

<sup>(1)</sup> Fiscal Years 2017 projected results are based upon the District's biennial budget for Fiscal Years 2016 and 2017 which was approved by the Board on June 9, 2015, as subsequently updated in connection with the District's Fiscal Year 2017 semi-annual budget performance review to reflect actual results through December 31, 2016. See also "– Discussion of Projected Operating Results for Fiscal Year 2017" below.

<sup>(2)</sup> Fiscal Years 2018 through 2022 projected results are derived from the District's five-year financial forecast prepared in connection with the proposed biennial budget for Fiscal Years 2018 and 2019 which was presented to the Board on April 11, 2017. The biennial budget for Fiscal Years 2018 and 2019 is scheduled for consideration for adoption by the Board on June 27, 2017.

<sup>(3)</sup> Wastewater Revenues exclude grant receipts, taxes and certain reimbursements.

<sup>(4)</sup> Reflects adoption of 5.0% average annual rate increase for Fiscal Year 2017, and assumes average annual rate increases of 5.0% in each of Fiscal Years 2018 and 2019 and 4.0% in each of Fiscal Years 2020, 2021 and 2022. See "CONSTITUTIONAL AND STATUTORY LIMITATIONS ON TAXES AND APPROPRIATIONS" in the front part of this Official Statement.

<sup>(5)</sup> Assumes 1.00% earnings rate for Fiscal Year 2017, 2.00% earnings rate in Fiscal Years 2018 and 2019, and 2.50% earning rate thereafter. Excludes non-cash change in fair market value of investments.

(Table footnotes continued on following page.)

(Footnotes to table continued from prior page.)

- (6) Other Revenue includes estimated collections from power sales and inspection fees from the private sewer laterals program. Other Revenue also includes the anticipated receipt of BABs Interest Subsidy Payments relating to Series 2010B Bonds. In light of the potential effect on ongoing sequestration, the District has assumed cash receipts of approximately 33.25% of the interest payable on the Series 2010B Bonds (95% of the BABs Interest Subsidy Payments of 35% provided for under the American Recovery and Reinvestment Act of 2009). Upon the issuance of the Series 2017A Bonds and the effective date of the amendments to the Indenture pursuant to the Thirteenth Supplemental Indenture, the BABs Interest Subsidy Payments reasonably expected to be received by the District will no longer be treated as Other Revenue and instead will be treated as an offset to debt service on the Series 2010B Bonds for purposes of the Indenture. Treating the BABs Interest Subsidy Payments expected to be received by the District in Fiscal Years 2018, 2019, 2020, 2021 and 2022 as an offset to debt service as permitted by the Indenture (rather than as Other Revenue) would result in Parity Debt Service Coverage in each of such fiscal years as follows: Fiscal Year 2018: 1.85x, Fiscal Year 2019: 1.88x, Fiscal Year 2020: 1.94x, Fiscal Year 2021: 1.96x and Fiscal Year 2022: 2.04x.
- (7) Assumes approximately 3.2-3.8% annual increase in Operating Expenses.
- (8) Operation and Maintenance Costs excludes those expenses paid from District's share of 1% countywide *ad valorem* taxes. Under current District policy, taxes are used to pay for operations allocable to storm water processing and infiltration/inflow processing.
- (9) Debt service on the Series 2010B Bonds is gross of the expected BABs Interest Subsidy Payments but net of capitalized interest. Assumes issuance of \$20.5 million of new money bonds in Fiscal Year 2018 and \$14 million in Fiscal Year 2019 at an annual interest rate of 5.00%.
- (10) Assumes interest only at 0.50% per annum in Fiscal Years 2017, 2.50% per annum in Fiscal Years 2018 and 2019 and 3.00% per annum thereafter with no principal amortization. Assumes \$15.0 million of Wastewater System CP Notes outstanding.

Source: The District.

### **Discussion of Projected Operating Results for Fiscal Year 2017**

Total Wastewater System revenues for Fiscal Year 2017 are projected to be \$113.4 million or \$2.4 million more than originally budget primarily due to higher than budgeted revenues for the Resource Recovery Program and Wastewater connection charges. Wastewater treatment revenues for Fiscal Year 2017 are projected to be \$70.0 million which is \$2.1 million less than budgeted due to the expectation that customers will maintain many of their conservation habits from the recent drought. Projected Fiscal Year 2017 operating expenses are projected to be \$57.3 million which is \$4.0 million less than budgeted, primarily attributable less spending on operating labor and avoided operating expenses from the decision to hold off on a planned major expansion of the Resource Recovery Program. If the current projections of revenues and expenditures are realized, the District would end Fiscal Year 2017 with a debt service coverage ratio of 1.93.

### **Discussion of Budget Projections for Fiscal Years 2018 through 2022**

The five-year financial forecast for the period between Fiscal Years 2018 and 2022 is based on specified assumptions, reflected in the footnotes to Table 16 and outlined below. The first two years in the five-year financial forecast are based upon the District's two-year budget. The proposed biennial budget for Fiscal Years 2018 and 2019 was presented to the Board on April 11, 2017. The biennial budget for Fiscal Years 2018 and 2019 is scheduled for consideration for adoption by the Board on June 27, 2017. In conjunction with the Board's consideration for adoption of the District's proposed biennial budget, the Board will consider for adoption proposed rate increases for Fiscal Years 2018 and 2019, following a public hearing on such proposed rate increases to be held on July 11, 2017. See "– Rates and Charges" above.

Based upon the base budget assumptions outlined below, revenues are forecast to increase by 4.1% annually over the five-year period between Fiscal Years 2018 and 2022 while forecasted operating expenses are expected to grow by an average of approximately 3.5% per year and debt service increases

by an average of 2.4% per year. Capital cash flow spending is projected at \$188 million over the five-year period between Fiscal Years 2018 and 2022. Projected capital expenditures are directed at sustained reinvestments in physical infrastructure. Planned capital projects include treatment plant infrastructure improvements, interceptor rehabilitation, odor control improvements and digester upgrades.

The average percentage of capital funded from debt is projected at 35% over that period, lower than the financial policy maximum of 65%. Revenue bond debt service coverage is projected to meet or exceed the 1.6x policy target each year and increase annually throughout the period. In Fiscal Year 2018 revenue bond debt service coverage ratio is projected to be 1.78x. Debt service coverage is projected to increase steadily, with no further draws on the Rate Stabilization Fund reserve, to 1.81x, 1.87x, 1.89x and 1.96x in Fiscal Years 2019, 2020, 2021 and 2022, respectively. Reserve balances, including the Rate Stabilization Fund reserve, are projected to meet or exceed the policy reserve levels throughout the five-year period. Total reserves are projected at over \$77.0 million in each year, and the Rate Stabilization Fund reserve is projected to remain at \$24.1 million throughout the five-year projection period.

The five-year financial forecast for the period between Fiscal Years 2018 and 2022 is based on certain assumptions, which the District believes to be reasonable, incorporating among other factors a slight decrease in the volume of treatment flow due to lower water use in recent years. The assumed overall increases to treatment rates and wet weather charges for Fiscal Years 2018 and 2019 are 5.0% and 5.0%, respectively, consistent with the proposed budget and Proposition 218 notice. Lower overall rate increases of 4.0% per annum are assumed for Fiscal Years 2020, 2021 and 2022.

## **Employees' Retirement System**

**General.** The District has a contributory retirement system covering substantially all of its employees (including the Water System and Wastewater System). The East Bay Municipal Utility District Employees' Retirement System ("Retirement System") was established in 1937 to administer a single-employer, contributory, defined benefit pension plan (the "Plan") to provide retirement, disability, survivorship and post-employment health insurance benefits ("HIB") for eligible directors, officers and employees of the District. The Plan is funded by contributions from its members and from the District, and from investment earnings on Plan assets. The payment of benefits earned by Plan members of the Retirement System is an obligation of the District. Employees of the District are also covered by Social Security.

The Retirement System is administered by a Retirement Board composed of three members appointed by the District Board, two members elected by and from the active membership and one (nonvoting) member elected by and from the retired membership of the Retirement System. Ordinance No. 40 of the District, effective October 1, 1937, as amended (the "Retirement System Ordinance"), assigns the authority to establish Plan benefit provisions to the District Board.

Contributions to the Retirement System are made by the members and the District. Each member's contribution is based upon a percentage of that member's covered compensation. The employee contribution rates for 1955/1980 Plan members (*i.e.*, employees first hired prior to January 1, 2013) are prescribed in the Retirement System Ordinance and may be adjusted by the District Board solely pursuant to the terms of a negotiated collective bargaining agreement or MOU with employee bargaining units. Pursuant to applicable provisions of the California Public Employees' Pension Reform Act of 2013 as codified ("PEPRA"), 2013 Tier members (*i.e.*, employees first hired on or after January 1, 2013) are required to contribute at least 50% of the "normal cost" rate (see "*California Pension Reform Act*" below). The District employees' contribution rate for 1955/1980 Plan members (which includes a 0.09% contribution to the HIB) was increased from 6.83% to 7.33% effective April 22, 2013, to 7.83% beginning April 21, 2014, to 8.33% beginning April 20, 2015 and to 8.75% on April 18, 2016. The current District employees' contribution rate for 1955/1980 Plan members (including

the 0.09% contribution to the HIB) is 8.75%. The District employees' contribution rate for 2013 Tier members (which also includes a 0.09% contribution to the HIB) is established by the District Board, and such rates are based upon actuarial valuations. The current District employees' contribution rate for 2013 Tier members (including the 0.09% contribution to the HIB) is 8.84%.

The District (employer) contributions are based upon percentages of the aggregate amount of members' covered compensation. Employer contribution percentages are established by the District Board. Such percentages are based upon actuarial valuations. The District's employer contribution percentage for 1955/1980 Plan members has been established at 43.22% for Fiscal Year 2016-17 (including a 5.51% contribution to the HIB) and has been established at 35.98% for 2013 Tier members (including a 5.06% contribution to the HIB). For Fiscal Year 2017-18, based upon the June 30, 2016 funding valuation reports prepared by the actuary, the recommended District employer contribution percentage for 1955/1980 Plan members is 43.18% (including a 5.26% contribution to the HIB) and is 36.16% for 2013 Tier members (including a 4.86% contribution to the HIB).

The June 30, 2016 funding valuation reports, which provide the recommended contribution rates for Fiscal Year 2017-18, were presented by the actuary to the Retirement Board at their January 19, 2017 meeting, at which time the reports were adopted by the Board.

The District estimates that approximately 85% of the District's annual contributions are attributable to the Water System and approximately 15% are attributable to the Wastewater System.

As of June 30, 2016, collectively for the Water and Wastewater Systems, there were 1,789 active (non-retired) Plan members, 248 terminated Plan members entitled to but not yet receiving benefits and 1,630 retirees and beneficiaries receiving benefits.

Table 17 sets forth the number of active (non-retired) members, total Plan assets, District and Member contributions and retirement allowances paid in the five Fiscal Years 2012 through 2016.

**Table 17**  
**RETIREMENT SYSTEM**  
**Active (Non-Retired) Members, Total Plan Assets, District and Member Contributions and**  
**Allowances Paid**  
**Five Fiscal Years Ended June 30, 2016<sup>(1)</sup>**

<i><b>Fiscal Year Ended June 30</b></i>	<i><b>Active (Non-Retired) Members<sup>(2)</sup></b></i>	<i><b>Total Plan Assets<sup>(3)</sup></b></i>	<i><b>District Contribution<sup>(4)</sup></b></i>	<i><b>Member Contributions</b></i>	<i><b>Allowances Paid From Retirement Plan<sup>(5)</sup></b></i>
2012	1,927	\$ 986,972,000	\$59,651,000	\$10,723,000	\$66,843,000
2013	1,898	1,124,328,000	61,567,000	10,566,000	72,095,000
2014	1,952	1,346,888,000	70,117,000	12,133,000	78,265,000
2015	2,001	1,407,209,000	73,141,000	13,427,000	85,184,000
2016	2,037	1,418,129,000	74,672,000	14,925,000	91,571,000

<sup>(1)</sup> Includes Health Insurance Benefit.

<sup>(2)</sup> Includes active plan members and terminated plan members entitled to but not yet receiving benefits.

<sup>(3)</sup> Market value as of June 30 of such Fiscal Year as shown in the audited financial statements of the Retirement System.

<sup>(4)</sup> The District estimates that approximately 85% of the District's annual contributions are attributable to the Water System and approximately 15% are attributable to the Wastewater System.

<sup>(5)</sup> Includes benefits paid and refunds of contributions.

Source: The District.

The Retirement System is an integral part of the District and, as noted above, the District appoints the majority of the governing body of the Retirement System and provides for its funding. Accordingly, the Retirement System's operations are reported as a Pension and Other Employee Benefit Trust Fund in the District's basic financial statements. The Retirement System also issues separately available financial statements on an annual basis. Such financial statements can be obtained from the District at 375 Eleventh Street, Oakland, California 94607.

The amounts set forth in this discussion of the District's Retirement System, including, for example, actuarial accrued liabilities and funded ratios, are based upon numerous demographic and economic assumptions, including investment return rates, inflation rates, salary increase rates, cost of living adjustments, postemployment mortality, active member mortality, and rates of retirement. Prospective purchasers of the District's bonds are cautioned to review and carefully assess the reasonableness of the assumptions set forth in the documents that are cited as the sources for such information. In addition, prospective purchasers of the District's bonds are cautioned that such sources and the underlying assumptions are made as of their respective dates, and are subject to change. Prospective purchasers of the District's bonds should also be aware that some of the information presented in this discussion of the Retirement System contains forward-looking statements and the actual results of the Retirement System may differ materially from the information presented herein.

***Benefits.*** All regular full-time employees (as well as certain job share and intermittent employees) of the District are members of the Plan. In accordance with the Retirement System Ordinance, eligible employees become members of the Plan on the first day they are physically on the job. Retirement plan benefits are generally determined by a formula based on the employee's highest two years of compensation (highest 36 months for 2013 Tier members) and the length of employment with the District. Benefits adopted by the District vest in part with members after five years of continuous full-time employment. Vested members who terminate employment may elect a refund of their contributions or leave them in the Plan until eligible to receive benefits.

In addition to retirement benefits, the District provides post-employment health benefits assistance, administered by the Retirement System, for employees who retire from the District or their surviving spouses. As of June 30, 2016, there were 1,478 participants receiving these healthcare benefits. For participants entering the Retirement System prior to July 1, 1996, a monthly allowance of up to \$450 (up to \$550 for married retirees and retirees with domestic partners) is paid to retirees with at least five years of full-time service to reimburse the retiree-paid medical expenses (including any health, dental or long-term care insurance premiums paid by the retiree for his or her self, and current spouse or domestic partner, or any health, dental or long-term care insurance premiums paid by the eligible surviving spouse or domestic partner of a retiree). Effective July 1, 1996, a 20-year vesting schedule for full benefits was implemented for all new employees. Effective January 1, 1999, retired members who had separated from the District prior to their retirement and who had at least five years of service also become eligible for the post-employment healthcare benefits based on the same vesting schedule.

***Actuarial Assumptions and Funding Policy.*** Under the Retirement System Ordinance, the District is required to have an actuarial study performed at least every two years, but the District's current policy is to have an actuarial study performed each year. The most recent actuarial study of the Retirement System, including the pension and the HIB trusts, was performed by Segal Consulting, as of June 30, 2016.

The actuarial report provides a basis for the District Board's decision regarding the rate of contributions by the District to the Retirement System, including both the pension and the HIB trusts. The District makes its contribution using rates determined by its outside actuaries.

The Governmental Accounting Standards Board (“GASB”) has issued two Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 is for plan reporting and Statement 68 is for employer reporting. The information needed to comply with Statement 67 was provided by the actuary in a separate report (*i.e.*, separate from the pension funding valuation report) dated January 11, 2017, and the information needed to comply with Statement 68 was provided by the actuary in a separate report dated August 12, 2016 (for employer reporting as of June 30, 2016). The GASB Statements require much shorter periods for recognition of non-investment gains/losses and actuarial assumption changes, as well as for recognition of investment gains/losses. The GASB Statements provide for a complete separation between financial reporting and funding requirements for pension plans. Under the GASB statements, the District is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan’s Net Position or market value of assets) in its financial statements. See Note 8(G) and the Required Supplementary Information in the audited financial statements of the District included in APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015” for additional information regarding the net pension liability of the District for the Retirement System.

To calculate the required contribution for each Fiscal Year, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than assumed (an actuarial loss). If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

A summary of the funding method and assumptions utilized in the actuarial study as of June 30, 2016 are described below.

*Funding Method.* The Plan’s funding policy provides for periodic District contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due as specified by the ordinance governing the Retirement System. The Entry Age Cost Method is used for this purpose. Under the Entry Age Cost Method, there are two components to the total contributions: (i) the normal cost, which is the amount of contributions required to fund the benefit allocated to the current year of service (associated with active employees only), and (ii) an amortization payment on any unfunded actuarial accrued liability (“UAAL”). The normal cost is calculated on an individual basis where the entry age normal cost is calculated as the sum of the individual normal costs. The UAAL (past service liability) is amortized as a level percentage of payroll on a closed basis over the amortization periods described below. The actuarial accrued liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation.

*Amortization Periods.* As of June 30, 2016, the UAAL is currently being funded using a layered approach. Each layer of the UAAL established prior to July 1, 2011 is being funded over a separate decreasing 30-year period, starting from the date the layer was originally established. On or after July 1, 2011, changes in the UAAL attributable to plan amendments are amortized over separate decreasing 15-year periods; changes in the UAAL attributable to assumption or method changes are amortized over separate decreasing 25-year periods; and changes in the UAAL attributable to actuarial gains/losses (*i.e.*, the extent to which actual overall experience deviates from the assumptions) are amortized over separate decreasing 20-year periods. Under the layered approach, any new UAAL layer that emerges between the prior and the current actuarial valuation (due to deviations between actual and expected actuarial experience, changes in actuarial assumptions used to measure the liabilities or other factors) will be determined and factored into the District’s contribution rates so that it will be paid off after its respective amortization period described above.

Actuarial Value of Assets (Asset Smoothing Method). Methods used to compute District contribution requirements include a five-year smoothing of the difference between the actual market return and the expected return on the market value of the assets (with further adjustments as may be required to keep the smoothed assets within 30% of market value). The impact of this will result in a “smoothed” valuation value of assets (or “Actuarial Value of Assets”) that is higher or lower than the market value of the assets depending on whether the amount that is being smoothed is either a net deferred loss or a net deferred gain.

Actuarial Assumptions. A number of assumptions are used to calculate the costs of the Plan and to compute contribution requirements for the Plan. The principal assumptions used in preparing the pension plan and HIB funding valuation reports as of June 30, 2016 and the pension plan financial reporting (*i.e.*, GASB 67) valuation report as of June 30, 2016 include:

1. Investment rate of return: 7.25%.
2. Inflation rate: 3.00%.
3. Interest credited to member contributions: 7.25%.
4. Projected salary increases: Ranges from 9.50% to 4.00% based on years of service (includes inflation at 3.00% plus across the board salary increase of 0.50% plus merit and promotional increases).
5. Cost of living adjustments: 3.00%.
6. Increase in HIB maximum monthly allowance: The Plan does not provide for an automatic increase in the HIB allowance and no such increase is assumed in the valuation.
7. Additional assumptions: Additional assumptions were used regarding rates of termination from active membership, post-retirement mortality, active member mortality, disability rates and rates of retirement.

Adopted Changes in Actuarial Assumptions and Amortization Periods. Under the ordinance governing the Retirement System, the District is required to have an actuarial experience study conducted no less frequently than every four years in order to review the mortality, service and compensation experience of the members, retired members and beneficiaries of the Retirement System, over the study period. The experience study provides the factual information upon which the outside actuary makes recommendations to the District regarding the economic and demographic assumptions that provide the basis for the actuarial valuation of the assets and liabilities of the Retirement System. In November 2016, Segal Consulting completed and presented to the Retirement Board its Analysis of Actuarial Experience During the Period July 1, 2012 through June 30, 2016, for the Retirement System (the “2016 Experience Study”). The 2016 Experience Study utilized demographic data of the Plan’s members and retirees from the last four actuarial valuations and provided recommendations regarding changes to the economic and demographic actuarial assumptions to be used in the June 30, 2016 and later actuarial valuations. Pursuant to the 2016 Experience Study, the actuary recommended changes in a number of the actuarial assumptions used to calculate the costs of the Plan and to compute the future contribution requirements for the Plan, including changes in the assumptions from those used in the actuarial study of the Plan as of June 30, 2015. At its November 17, 2016 meeting, the Retirement Board approved the changes in assumptions recommended by the actuary for the actuarial valuation to be performed as of June 30, 2016 (the actuarial assumptions used in the actuarial study of the Plan as of June 30, 2016 are described under “Actuarial Assumptions” above). Some of the changes in the actuarial assumptions from those used in the actuarial study of the Plan as of June 30, 2015 are as follows: (i) a reduction in the assumed investment rate of return from 7.50% to 7.25%; (ii) a reduction in the assumed interest crediting rate for member contributions from 7.50% to 7.25%; (iii) an overall reduction in the current 1955/1980 Plan retirement

rates for males and an overall increase for females; and (iv) a change in the mortality rates to the RP-2014 family of mortality tables, to anticipate slightly shorter life expectancies.

In the June 30, 2016 valuation, the actuary determined the increase in the actuarial accrued liability for the pension plan (not including the HIB) due to the assumption changes (including the change in the investment return assumption from 7.50% to 7.25%) to be \$52.6 million.

**Contribution History.** The schedule of District contributions for each of the pension plan and the HIB plan for the last five Fiscal Years are shown in Table 18:

**Table 18**  
**RETIREMENT SYSTEM**  
**History of Contributions**  
**Five Fiscal Years Ended June 30, 2016**  
**(Dollar Amounts in Thousands)**

**Pension Plan:**

<i><u>Fiscal Year</u></i> <i><u>Ended June 30</u></i>	<i><u>District</u></i> <i><u>Contribution Rate</u></i> <i><u>at June 30<sup>(1)</sup></u></i>	<i><u>Annual Required</u></i> <i><u>Contribution</u></i>	<i><u>Actual</u></i> <i><u>Contribution</u></i>	<i><u>Percentage</u></i> <i><u>Contributed</u></i>
2012	32.91%	\$52,156	\$52,156	100%
2013	34.46	53,795	53,795	100
2014	38.30 <sup>(2)</sup>	61,660	61,660	100
2015	38.55	64,177	64,177	100
2016	37.32	65,218	65,218	100

**Health Insurance Benefit:**

<i><u>Fiscal Year</u></i> <i><u>Ended June 30</u></i>	<i><u>District</u></i> <i><u>Contribution Rate</u></i> <i><u>at June 30<sup>(1)</sup></u></i>	<i><u>Annual Required</u></i> <i><u>Contribution<sup>(3)</sup></u></i>	<i><u>Actual</u></i> <i><u>Contribution<sup>(3)</sup></u></i>	<i><u>Percentage</u></i> <i><u>Contributed<sup>(4)</sup></u></i>
2012	4.83%	\$11,289	\$7,762	69%
2013	5.10	11,145	8,039	72
2014	5.34	11,196	8,748	78
2015	5.45	11,254	9,272	82
2016	5.49	11,590	9,779	84

<sup>(1)</sup> Starting with Fiscal Year Ended (FYE) June 30, 2014, this rate represents the aggregate rate for the 1955/1980 Plan and the 2013 Tier. The rate has been aggregated based on projected annual payroll from two years prior to the FYE (e.g., the FYE June 30, 2016 rate is aggregated based on June 30, 2014 projected annual payroll), except where noted.

<sup>(2)</sup> Represents the aggregate rate for the 1955/1980 Plan and the 2013 Tier, based on the June 30, 2013 projected annual payroll (instead of the June 30, 2012 payroll) since the 2013 Tier did not become effective until January 1, 2013.

<sup>(3)</sup> Includes an interest adjustment to the end of the year.

<sup>(4)</sup> Percentage contributed was less than 100% as the District does not pre-fund the implicit retiree rate subsidy required to be valued under GASB Statements Nos. 43 and 45. See “– *Schedule of Funding Progress*” below. Source: The District.

As reflected in the funding actuarial study and shown (rounded to the nearest thousand dollars) in Table 19, the combined Actuarial Accrued Liability for pension and HIB benefits at June 30, 2016 was \$2,111,518,292 and the Actuarial Value of Assets was \$1,452,786,717, resulting in an Unfunded Actuarial Accrued Liability of \$658,731,575 and a funded ratio of the Plan under the Entry Age Cost

Method of 68.8%. As described above, the Actuarial Value of Assets has been calculated using a five-year smoothing of the difference between the actual market return and the expected return on the market value of the assets. The valuation was performed in accordance with generally accepted actuarial principles and practices and the District's funding policy that was last reviewed with the Board in 2012. The assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice (ASOPs).

Table 19 sets forth the Actuarial Accrued Liability, Actuarial Value and Market Value of Assets, the Unfunded Actuarial Accrued Liability, and Funded Ratios as of June 30 of each of the Fiscal Years 2012 through 2016 (the year the most recent actuarial information is available).

**Table 19**  
**RETIREMENT SYSTEM**  
**(Pension Plan and HIB Combined)**  
**Actuarial Accrued Liability, Actuarial Value and Market Value of Assets,**  
**Unfunded Actuarial Accrued Liability and Funded Ratios**  
**Five Fiscal Years Ended June 30, 2016<sup>(1)</sup>**  
**(Dollar Amounts in Thousands)**

<i>Fiscal Year Ended June 30</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Actuarial Value of Assets</i>	<i>Market Value of Assets</i>	<i>Unfunded Actuarial Accrued Liability (UAAL)<sup>(2)</sup></i>	<i>Funded Ratio on Actuarial Value</i>	<i>Funded Ratio on Market Value</i>
2012	\$1,659,897	\$1,035,786	\$986,972	\$624,111	62.40%	59.46%
2013	1,750,910	1,112,370	1,124,328	638,540	63.53	64.21
2014	1,866,563	1,229,955	1,346,888	636,608	65.89	72.16
2015	1,957,833	1,350,292	1,407,209	607,541	68.97	71.88
2016	2,111,518 <sup>(3)</sup>	1,452,787	1,418,129	658,731	68.80	67.16

<sup>(1)</sup> Dollars rounded to nearest thousand.

<sup>(2)</sup> The District estimates that approximately 85% of the UAAL is attributable to the Water System and approximately 15% is attributable to the Wastewater System. The UAAL is determined based on the Actuarial Value of Assets.

<sup>(3)</sup> Of this amount, \$115,655 is attributable to the HIB liabilities. The HIB liabilities as calculated for GASB reporting purposes, which include the implicit retiree rate subsidy, were \$147,585 using a discount rate of 6.75%.

Source: Segal Consulting.

As of June 30, 2016, the market value of the combined pension and HIB plan's assets was \$1,418,129,000 and the projected benefit obligation ("PBO") was \$2,061,202,000, resulting in a funded ratio of the plan under the PBO basis of 68.8%. Under the plan provisions, determination of the funded ratio on a PBO basis is required and certain cost of living increases are granted when the funded ratio of the plan is 85% or higher as calculated on the PBO basis.

**Schedule of Funding Progress.** As required by GASB, the District reports the schedule of funding progress for each of the pension plan and the post-employment healthcare plan (HIB), based on the results of the funding valuations. The schedule of funding progress presents 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.

The schedule of funding progress for the pension plan is set forth in Table 20.

**Table 20**  
**PENSION PLAN**  
**Schedule of Funding Progress**  
**(Dollar Amounts in Thousands)**

<i>Actuarial Valuation Date June 30</i>	<i>Actuarial Value of Assets</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Unfunded AAL (UAAL)</i>	<i>Funded Ratio</i>	<i>Covered Payroll</i>	<i>UAAL as a Percentage of Covered Payroll</i>
2012	\$1,021,546	\$1,556,696	\$535,150	65.6%	\$158,847	336.9%
2013	1,095,847	1,646,534	550,687	66.6	159,246	345.8
2014	1,210,321	1,756,706	546,385	68.9	167,196	326.8
2015	1,327,113	1,845,912	518,799	71.9	174,899	296.6
2016	1,425,785	1,995,863	570,078	71.4	183,971	309.9

Source: Segal Consulting's Actuarial Valuation and Review of Pension Plan as of June 30, 2014.

The schedule of funding progress for the post-employment healthcare plan is set forth in Table 21.

The retiree health liabilities reported in the actuarial study as of June 30, 2016 (and referred to in Table 19 above) will not match those required to be used for GASB reporting purposes as shown in Table 21. The liabilities as reflected in the actuarial study have not been adjusted to include the implicit retiree rate subsidy as required under GASB reporting requirements. (Note that when premiums for active employees are determined on a pooled basis with premiums for retirees under age 65, a significant accounting obligation may exist even though the retiree under age 65 contributes most or all of the blended premium cost of the plan. The average costs for retirees if determined on a stand-alone basis is likely to exceed the average cost for the whole group, leading to an implicit subsidy for these retirees. The GASB accounting standard requires the employer to identify and account for this implicit subsidy as well as any explicit subsidies the employer may provide.) In addition, the liabilities for GASB reporting purposes for the HIB portion of the obligations shown below were determined based upon a lower discount rate (*i.e.*, 6.75%) than the 7.25% investment rate of return used in Segal Consulting's prefunding study. The liabilities calculated for GASB reporting purposes shown in Table 21 are therefore higher than those reflected in the actuarial study as of June 30, 2016 and described above.

**Table 21**  
**POST-EMPLOYMENT HEALTHCARE BENEFIT (HIB)**  
**Schedule of Funding Progress**  
**(Dollar Amounts in Thousands)**

<i>Actuarial Valuation Date June 30</i>	<i>Actuarial Value of Assets</i>	<i>Actuarial Accrued Liability (AAL)</i>	<i>Unfunded AAL (UAAL)</i>	<i>Funded Ratio</i>	<i>Covered Payroll</i>	<i>UAAL as a Percentage of Covered Payroll</i>
2012	\$14,240	\$138,240	\$123,999	10.3%	\$158,847	78.1%
2013	16,522	138,120	121,598	12.0	159,246	76.4
2014	19,634	140,416	120,782	14.0	167,196	72.2
2015	23,179	143,946	120,767	16.1	174,899	69.0
2016	27,002	147,585	120,583	18.3	183,971	65.5

Source: Segal Consulting's Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2016 in accordance with GASB Statements No. 43 and 45.

**Net Pension Liability.** Under GASB 67, the pension plan is required to disclose the Net Pension Liability for financial reporting purposes. When measuring pension liability, GASB uses the same actuarial cost method (entry age method) and the same type of discount rate (expected return on assets) as the District uses for funding. This means that the Total Pension Liability (“TPL”) measure for financial reporting is determined on the same basis as the District’s AAL measure for funding. The Net Pension Liability (“NPL”) is equal to the difference between the TPL and the Plan’s Fiduciary Net Position. The Plan’s Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is the same as the UAAL calculated on a market value basis. The Net Pension Liability as of June 30, 2016 and June 30, 2015 is set forth in Table 22.

**Table 22**  
**PENSION PLAN**  
**Net Pension Liability**

	<u>June 30, 2016</u>	<u>June 30, 2015</u>
Total pension liability	\$ 1,995,863	\$ 1,845,912
Plan fiduciary net position	<u>(1,391,771)</u>	<u>(1,383,053)</u>
Net pension liability	\$ 604,092	\$ 462,859
Plan fiduciary net position as a % of the total pension liability	69.73%	74.93%

The NPL was measured as of June 30, 2016 and 2015. The Plan’s Fiduciary Net Position (plan assets) was valued as of the measurement date, while the Total Pension Liability was determined based upon the results of the actuarial valuations as of June 30, 2016 and 2015, respectively.

The discount rate used to determine the Total Pension Liability was 7.25% as of June 30, 2016 and 7.50% as of June 30, 2015, following the same assumptions used by the System in the pension funding valuations as of June 30, 2016 and June 30, 2015, respectively. It should be noted that, according to GASB, the discount rate used for financial reporting purposes should be based on the long-term expected rate of return on a retirement system’s investments, just as it is for funding. However, GASB requires that this assumption should be net of investment expenses but not net of administrative expenses (*i.e.*, without reduction for administrative expenses). Currently, the District’s investment return assumption used for the annual funding valuation is developed net of both investment and administrative expenses.

Additional information concerning the Retirement System may be found in APPENDIX B – “EAST BAY MUNICIPAL UTILITY DISTRICT AUDITED FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2016 AND 2015.”

**APPENDIX B**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
AUDITED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**

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**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**BASIC FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**

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**EAST BAY MUNICIPAL UTILITY DISTRICT  
BASIC FINANCIAL STATEMENTS  
For the Years Ended June 30, 2016 and 2015**

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## INDEPENDENT AUDITOR'S REPORT

Board of Directors  
East Bay Municipal Utility District  
Oakland, California

### ***Report on Financial Statements***

We have audited the accompanying financial statements of each major fund and the discretely presented component unit, of the East Bay Municipal Utility District as of and for the years ended June 30, 2016 and 2015, and the related notes to the financial statements, which collectively comprise the District'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 accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits 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 auditor's 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 District'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 District'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 opinions.

## ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial positions of each major fund and the discretely presented component unit of the East Bay Municipal Utility District as of June 30, 2016 and 2015, and the respective changes in the financial positions and cash flows, where applicable, thereof for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

## ***Change in Accounting Principle***

Management adopted the provisions of Governmental Accounting Standards Board Statement No. 72 – *Fair Value Measurement and Application*, which became effective during the year ended June 30, 2016 as discussed in Note 1S to the financial statements. This statement had no effect on the financial statements.

The emphasis of this matter does not constitute a modification to our opinions.

## ***Other Matters***

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that Management's Discussion and certain schedules related to the Pension and Post Employment Healthcare Plans 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 this information in accordance with generally accepted auditing standards 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.

### ***Other Information***

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the East Bay Municipal Utility District's basic financial statements as a whole. The Supplemental Information as listed in the Table of Contents are presented for purposes of additional analysis and are not required parts of the basic financial statements.

The Supplemental Information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with generally accepted auditing standards in the United States of America. In our opinion, the Supplemental Information is fairly stated in all material respects in relation to the basic financial statements as a whole.

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated August 31, 2016 on our consideration of the East Bay Municipal Utility District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

*Maze + Associates*

Pleasant Hill, California  
August 31, 2016

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# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

This section presents management's analysis of the East Bay Municipal Utility District's (the District) financial condition and activities as of and for the year ended June 30, 2016. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to the District's basic financial statements.

This information should be read in conjunction with the audited financial statements that follow this section. The District, as the primary governmental entity, includes within the financial statements, the financial position and activities of the District's Employees' Retirement System (Employees' Retirement System) as a component unit. The Employees' Retirement System issues its own financial statements and MDA under separate cover. Significant matters pertaining to the Employees' Retirement System have been included in the notes to the financial statements as deemed appropriate.

The information in this MDA is presented under the following headings:

Organization and Business

Overview of the Basic Financial Statements

Financial Analysis

Capital Assets

Debt Administration

Request for Information

### ORGANIZATION AND BUSINESS

The District provides water and wastewater services to industrial, commercial, residential and public authority users. The Water System collects, transmits, treats, and distributes high quality water to approximately 60% (332 square miles) of the developed area within Alameda and Contra Costa counties of California and serves a population of about 1.4 million. The Wastewater System intercepts and treats wastewater from residences and industries within an 88 square miles service area including the communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District and serves a population of about 680,000. The District recovers cost of service primarily through user fees.

### OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

The District's basic financial statements are comprised of two components: (1) Fund Financial Statements and (2) Notes to Basic Financial Statements. The report also contains other required supplementary information in addition to the basic financial statements.

***Fund Financial Statements.*** A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The District, like other special purpose governments, uses fund accounting to ensure and demonstrate compliance with financial-related legal requirements.

***Proprietary Funds.*** The District's proprietary funds consist of two enterprise funds, the Water System and the Wastewater System. Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

## EAST BAY MUNICIPAL UTILITY DISTRICT

### Management's Discussion and Analysis

June 30, 2016

The District's proprietary fund statements include:

The *Balance Sheet* presents information on the District's assets and deferred outflows, and liabilities and deferred inflows, with the difference between the two reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the District is improving or deteriorating.

While the Balance Sheet provides information about the nature and amount of resources and obligations at year-end, the *Statement of Revenues, Expenses, and Changes in Net Position* presents the results of the District's operations over the course of the fiscal year and information as to how the net position changed during the year. This statement can be used as an indicator of the extent to which the District has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expense of employee earned but unused vacation leave.

The *Statement of Cash Flows* presents changes in cash and cash equivalents resulting from operational, capital, noncapital, and investing activities. This statement summarizes the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and excludes noncash accounting measures of depreciation or amortization of assets.

***Fiduciary Fund.*** Fiduciary funds are used to account for resources held for the benefit of parties outside the government. The District's fiduciary fund consists of the Pension and Other Employee Benefit Trust fund, which is maintained to account for assets held by the Employees' Retirement System in a trustee capacity for vested and retired employees. The accounting used for fiduciary funds is much like that used for the proprietary funds.

**Notes to Basic Financial Statements.** The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to basic financial statements can be found on pages 29 to 76 of this report.

**Other Information.** In addition to the basic financial statements and accompanying notes, this report also presents *certain required supplementary information* concerning the District's progress in funding its obligation to provide pension and other post-employment healthcare benefits to its employees. Such required supplementary information can be found on pages 79 to 82 of this report.

## EAST BAY MUNICIPAL UTILITY DISTRICT

### Management's Discussion and Analysis

June 30, 2016

## FINANCIAL ANALYSIS

### ***Financial Highlights***

In fiscal year 2016, EBMUD continued to effectively manage its finances and strengthen its financial position by adopting sufficient water and wastewater rates to fund capital infrastructure improvements and to maintain strong financial performance. The following results of operations indicate a continuing strong and stable fiscal position.

The total assets and deferred outflows of the District exceeded the total liabilities and deferred inflows by \$1.4 billion (*net position*).

Net position increased by \$119 million or 9% during the fiscal year.

Capital assets increased by \$124 million or 3% to \$4.5 billion.

Operating revenue increased by \$62 million or 13% to \$525 million.

Operating expense increased by \$30 million or 8% to \$415 million.

Non-operating net expense decreased by \$9 million or 14% to (\$57) million.

Capital contributions decreased by \$10 million or 13% from the prior fiscal year.

### ***Financial Position***

In the current year, the District's total net position increased by \$119 million or 9% during the fiscal year. Current and other assets decreased by \$90 million or 10%. Capital assets increased by \$124 million or 3%. By far the largest portion of the District's net position, 89% or \$1.2 billion, represents its investment in capital assets necessary to provide services.

- The Water System's net position increased by \$94 million or 9% during the year ended June 30, 2016.
- The Wastewater System's net position increased by \$25 million or 10% during the year ended June 30, 2016.

In the previous fiscal year, the District's total net position increased by \$87 million or 5% before \$477 million decrease in prior period adjustment per implementation of GASB 68. Current and other assets increased by \$79 million or 10%. Capital assets increased by \$121 million or 3%. By far the largest portion of the District's net position, 82% or \$1.0 billion, represents its investment in capital assets necessary to provide services.

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

Table 1 shows the District's net position for the fiscal years ended June 30, 2016, 2015 and 2014:

**Table 1**

Net Position

Water and Wastewater

June 30, 2016 and 2015

(In thousands)

	<u>2016</u>	<u>2015</u>	<u>Variance</u>	<u>%</u>
Current and other assets	\$ 776,898	866,777	(89,879)	(10)%
Capital assets	4,489,702	4,366,034	123,668	3%
Deferred outflow of resources	148,078	104,496	43,582	42%
Total assets and deferred outflow	<u>5,414,678</u>	<u>5,337,307</u>	<u>77,371</u>	1%
Current and other liabilities	729,648	677,370	52,278	8%
Long-term liabilities	3,173,637	3,256,459	(82,822)	(3)%
Deferred inflow of resources	119,093	129,827	(10,734)	(8)%
Total liabilities and deferred inflow	<u>4,022,378</u>	<u>4,063,656</u>	<u>(41,278)</u>	(1)%
Net position:				
Net investment in capital assets	1,249,549	1,047,315	202,234	19%
Restricted	272,138	276,009	(3,871)	(1)%
Unrestricted	(129,387)	(49,673)	(79,714)	160%
Total net position	<u>\$ 1,392,300</u>	<u>1,273,651</u>	<u>118,649</u>	9%

Net Position

Water and Wastewater

June 30, 2015 and 2014

(In thousands)

	<u>2015</u>	<u>2014</u>	<u>Variance</u>	<u>%</u>
Current and other assets	\$ 866,777	788,030	78,747	10%
Capital assets	4,366,034	4,244,628	121,406	3%
Deferred outflow of resources	104,496	45,753	58,743	128%
Total assets and deferred outflow	<u>5,337,307</u>	<u>5,078,411</u>	<u>258,896</u>	5%
Current and other liabilities	677,370	211,351	466,019	220%
Long-term liabilities	3,256,459	3,133,074	123,385	4%
Deferred inflow of resources	129,827	70,304	59,523	85%
Total liabilities and deferred inflow	<u>4,063,656</u>	<u>3,414,729</u>	<u>648,927</u>	19%
Net position:				
Net investment in capital assets	1,047,315	1,083,394	(36,079)	(3)%
Restricted	276,009	297,740	(21,731)	(7)%
Unrestricted	(49,673)	282,548	(332,221)	(118)%
Total net position	<u>\$ 1,273,651</u>	<u>1,663,682</u>	<u>(390,031)</u>	(23)%

## EAST BAY MUNICIPAL UTILITY DISTRICT

### Management's Discussion and Analysis

June 30, 2016

#### *Results of Operations*

In the current fiscal year, the District's total operating revenue of \$525 million for the year increased by \$62 million and total operating expense of \$415 million for the year increased by \$30 million. The change in net position (including capital contributions) increased from \$87 million in the previous fiscal year to \$119 million in the current fiscal year. The District's total net position increased from \$1,274 million to \$1,392 million during the current fiscal year.

The major components of the District's results of operations in the current fiscal year were:

- Water revenues increased by \$59 million, reflecting an 8% water rate increase offset by a 13.8% decrease in billed water consumption and an additional \$51 million drought surcharge in the current fiscal year.
- Wastewater revenues remained stable in the current fiscal year compared to the prior year.
- Operating expense increased by \$30 million, primarily due to a \$21 million increase in supplemental water purchase and a \$6 million increase in water treatment and distribution expenses to deliver and treat the additional water supply from the Sacramento River.
- Non-operating net expense decreased by \$9 million primarily due to a \$15 million decrease in bond interest expense resulting from lower net adjusted interest expense and no non-recurring interest expense paid for advance refunding as in the prior fiscal year. The decrease in expense was offset by the \$3 million decrease of equity in JPA partnership fund compared to additional equity recognized in the prior fiscal year and \$3 million decrease in other income from lower land sales in the current fiscal year.
- Capital contributions decreased by \$10 million primarily reflecting a decrease of \$22 million in seismic improvement surcharges, which have now ended, offset by a \$10 million increase in system capacity charges and an increase of \$2 million in grants and other reimbursements in the current fiscal year compared to the prior year. Page 16 contains additional capital contributions information.

## **EAST BAY MUNICIPAL UTILITY DISTRICT**

### **Management's Discussion and Analysis**

June 30, 2016

In the previous fiscal year, the District's total operating revenue of \$464 million for the year increased by \$2 million and total operating expense of \$385 million for the year decreased by \$21 million. The change in net position (including capital contributions) increased from \$35 million in the previous fiscal year to \$87 million in fiscal year 2015. The District's total net position decreased from \$1,664 million to \$1,274 million during fiscal year 2015 after \$477 million prior period adjustment per implementation of GASB 68.

The major components of the District's results of operations in fiscal year 2015 were:

- Water revenues decreased by \$5 million, mainly reflecting an 11.4% decrease in billed water consumption offset by a 9.5% water rate increase in fiscal year 2015.
- Wastewater revenues increased by \$4 million, mainly reflecting an 8.5% rate increase in fiscal year 2015.
- Operating expense decreased by \$21 million, primarily as a result of negative \$21 million pension expense per implementation of GASB 68 in fiscal year 2015. Due to the drought, raw water expenses increased by \$2 million and water treatment and distribution expenses increased by \$2 million as a result of purchase and treatment of supplemental water supply. General administration expenses decreased by \$12 million primarily as a result of a \$5 million decrease in amortization expenses and additional \$10 million capitalized administration expenses.
- Non-operating net expense decreased by \$4 million primarily due to a \$3 million in bond interest expense paid for advance refunding offset by the \$8 million reclassification of the change of equity in JPA partnership fund from amortization expense to non-operating expense in the prior fiscal year.
- Capital contributions increased by \$24 million primarily reflecting an increase of \$11 million in system capacity charges and \$12 million in earned contributions on constructions received in fiscal year 2015 compared to the prior year. Page 16 contains additional capital contributions information.

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

Table 2 shows changes in the District's net position for the fiscal years ended June 30, 2016, 2015, and 2014:

**Table 2**

Changes in Net Position

Water and Wastewater

June 30, 2016 and 2015

(In thousands)

	<u>2016</u>	<u>2015</u>	<u>Variance</u>	<u>%</u>
Operating Revenue:				
Water	\$ 421,240	362,136	59,104	16%
Sewer	77,542	76,417	1,125	1%
Power	4,771	3,303	1,468	44%
Wet weather facilities charges	21,918	21,809	109	0%
Total operating revenue	<u>525,471</u>	<u>463,665</u>	<u>61,806</u>	13%
Operating Expense:				
Raw water	64,386	43,538	20,848	48%
Water treatment & distribution	106,484	100,015	6,469	6%
Recreation areas, net	5,581	5,294	287	5%
Sewer lines & pumps	13,407	13,943	(536)	(4)%
Sewer treatment plant operations	33,292	32,478	814	3%
Customer accounting & collecting	19,110	19,869	(759)	(4)%
Financial and risk management	19,648	19,308	340	2%
Facilities management	6,329	6,858	(529)	(8)%
General administration	49,686	45,692	3,994	9%
Pension expense	(22,776)	(20,596)	(2,180)	11%
Depreciation (excluding amounts reported within the Water and Wastewater operations)	<u>119,791</u>	<u>118,309</u>	<u>1,482</u>	1%
Total operating expense	<u>414,938</u>	<u>384,708</u>	<u>30,230</u>	8%
Net operating income (expense)	110,533	78,957	31,576	40%
Nonoperating income (expense):				
Investment income	2,675	3,810	(1,135)	(30)%
Taxes & subventions	37,808	36,390	1,418	4%
Interest & amortization of bond expenses, net	(109,340)	(124,347)	15,007	(12)%
Increase (decrease) of Equity in JPA partnership fund	(3,081)	(360)	(2,721)	756%
Other income	<u>15,050</u>	<u>18,169</u>	<u>(3,119)</u>	(17)%
Total nonoperating income (expense), net	(56,888)	(66,338)	9,450	(14)%
Income (loss) before contributions	53,645	12,619	41,026	325%
Capital contributions	<u>65,004</u>	<u>74,596</u>	<u>(9,592)</u>	(13)%
Change in net position	118,649	87,215	31,434	36%
Total net position – beginning	1,273,651	1,663,682	(390,031)	(23)%
Prior period adjustment per implementation of GASB 68	<u>—</u>	<u>(477,246)</u>	<u>477,246</u>	(100)%
Total net position – ending	<u>\$ 1,392,300</u>	<u>1,273,651</u>	<u>118,649</u>	9%

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

**Table 2 (Continued)**

Changes in Net Position

Water and Wastewater

June 30, 2015 and 2014

(In thousands)

	<u>2015</u>	<u>2014</u>	<u>Variance</u>	<u>%</u>
Operating Revenue:				
Water	\$ 362,136	367,547	(5,411)	(1)%
Sewer	76,417	72,345	4,072	6%
Power	3,303	2,479	824	33%
Wet weather facilities charges	21,809	19,389	2,420	12%
Total operating revenue	<u>463,665</u>	<u>461,760</u>	<u>1,905</u>	0%
Operating Expense:				
Raw water	43,538	41,066	2,472	6%
Water treatment & distribution	100,015	97,610	2,405	2%
Recreation areas, net	5,294	5,166	128	2%
Sewer lines & pumps	13,943	13,658	285	2%
Sewer treatment plant operations	32,478	31,748	730	2%
Customer accounting & collecting	19,869	20,323	(454)	(2)%
Financial and risk management	19,308	17,019	2,289	13%
Facilities management	6,858	9,054	(2,196)	(24)%
General administration	45,692	57,724	(12,032)	(21)%
Pension expense	(20,596)	—	(20,596)	N/A
Depreciation (excluding amounts reported within the Water and Wastewater operations)	<u>118,309</u>	<u>112,662</u>	<u>5,647</u>	5%
Total operating expense	<u>384,708</u>	<u>406,030</u>	<u>(21,322)</u>	(5)%
Net operating income (expense)	78,957	55,730	23,227	42%
Nonoperating income (expense):				
Investment income	3,810	2,512	1,298	52%
Taxes & subventions	36,390	35,373	1,017	3%
Interest & amortization of bond expenses, net	(124,347)	(121,069)	(3,278)	3%
Increase (decrease) of Equity in JPA partnership fund	(360)	(8,146)	7,786	(96)%
Other income	18,169	20,501	(2,332)	(11)%
Total nonoperating income (expense), net	<u>(66,338)</u>	<u>(70,829)</u>	<u>4,491</u>	(6)%
Income (loss) before contributions	12,619	(15,099)	27,718	(184)%
Capital contributions	<u>74,596</u>	<u>50,231</u>	<u>24,365</u>	49%
Change in net position	87,215	35,132	52,083	148%
Total net position – beginning	1,663,682	1,628,550	35,132	2%
Prior period adjustment per implementation of GASB 68	<u>(477,246)</u>	<u>—</u>	<u>(477,246)</u>	N/A
Total net position – ending	<u>\$ 1,273,651</u>	<u>1,663,682</u>	<u>(390,031)</u>	(23)%

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

### *Liquidity*

The District had \$473 million in combined current and non-current District Cash and Investments as of June 30, 2016, a decrease of \$96 million compared to \$570 million as of June 30, 2015. Components of cash and investments for the year ended June 30, 2016 were:

- Water System total combined current and non-current cash and investments decreased by \$91 million or 19% compared to the previous fiscal year. Net increase (decrease) in cash and cash equivalents decreased by \$363 million compared to the prior year. This was primarily due to an increase of \$25.6 million from operating activities, decrease of \$203 million from capital and related financing activities from the previous year's new revenue bond issuance, and a decrease of \$187 million from the reallocation of investments between short-term and long-term.
- Wastewater System total combined current and non-current cash and investments decreased by \$5 million or 5% compared to the same date of the previous fiscal year. For the year ended June 30, 2016, net increase (decrease) in cash and cash equivalents decreased by \$16 million compared to the prior year. This was primarily due to a decrease of \$16 million from the reallocation of investments between short-term and long-term.

Table 3 shows the District's cash flow for the fiscal years ended June 30, 2016, 2015 and 2014:

<b>Table 3</b> Cash Flows Water and Wastewater System June 30, 2016 and 2015 (In thousands)				
	<b>2016</b>	<b>2015</b>	<b>Variance</b>	<b>%</b>
Cash and cash equivalents:				
Beginning of year	\$ 415,831	247,517	168,314	68%
Net cash provided by operating activities	246,911	218,125	28,786	13%
Net cash provided by financing activities	37,808	36,390	1,418	4%
Net cash provided by (used in) capital and related financing activities	(383,496)	(177,188)	(206,308)	116%
Net cash provided by (used in) investing activities	(112,354)	90,987	(203,341)	(223)%
Net increase (decrease) in cash and cash equivalents	(211,131)	168,314	(379,445)	(225)%
End of period	<u>204,700</u>	<u>415,831</u>	<u>(211,131)</u>	(51)%
Investments:				
Beginning of year	153,682	240,718	(87,036)	(36)%
Net increase (decrease) in investments	<u>114,760</u>	<u>(87,036)</u>	<u>201,796</u>	(232)%
End of period	<u>268,442</u>	<u>153,682</u>	<u>114,760</u>	75%
Total District Cash and Investments	<u>\$ 473,142</u>	<u>569,513</u>	<u>(96,371)</u>	(17)%

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

**Table 3 (Continued)**  
Cash Flows  
Water and Wastewater System  
June 30, 2015 and 2014  
(In thousands)

	<u>2015</u>	<u>2014</u>	<u>Variance</u>	<u>%</u>
Cash and cash equivalents:				
Beginning of year	\$ 247,517	217,601	29,916	14%
Net cash provided by operating activities	218,125	234,083	(15,958)	(7)%
Net cash provided by financing activities	36,390	35,373	1,017	3%
Net cash provided by (used in) capital and related financing activities	(177,188)	(260,545)	83,357	(32)%
Net cash provided by (used in) investing activities	90,987	21,005	69,982	333%
Net increase (decrease) in cash and cash equivalents	<u>168,314</u>	<u>29,916</u>	<u>138,398</u>	463%
End of period	<u>415,831</u>	<u>247,517</u>	<u>168,314</u>	68%
Investments:				
Beginning of year	240,718	259,341	(18,623)	(7)%
Net increase (decrease) in investments	<u>(87,036)</u>	<u>(18,623)</u>	<u>(68,413)</u>	367%
End of period	<u>153,682</u>	<u>240,718</u>	<u>(87,036)</u>	(36)%
Total District Cash and Investments	<u>\$ 569,513</u>	<u>488,235</u>	<u>81,278</u>	17%

### ***Cash and Investments by Fund***

In fiscal years 2016 and 2015, total cash and investments available for operating and capital activities are reported in current and noncurrent assets as unrestricted and restricted funds. Significant activities in current fiscal year were as follows: Water System used \$95 million in capital reserves to fund capital projects and equipment, and increased reserves of \$4 million in funds received for construction. Wastewater System used \$5 million in capital reserves to fund capital projects and equipment.

In the previous fiscal year, significant activities were as follows: Water System reserved an additional \$10 million in revenues in the rate stabilization fund, additional \$3 million in working capital, additional \$91 million in capital reserve, and released \$17 million debt service reserve fund due to revenue bonds' refunding. Wastewater System reserved an additional \$7 million in revenues in the rate stabilization fund, used \$7 million in capital reserve to fund capital projects and equipment, released \$3 million in debt service reserve fund due to refunding of the related revenue bonds, and released \$2 million in funds received for construction for the Private Sewer Lateral Incentive program.

Operating and Capital Reserves are components of Unrestricted Cash and Investments. Individual funds within Operating and Capital Reserves are funded pursuant to Board policy but are unrestricted as to use. The Unrestricted Reserve Balances indicate the District's ability to meet unanticipated revenue declines or expenditure increases. Unrestricted reserves are committed by the Board of Directors. This is distinct from restricted reserves which are legally constrained by law or by third party. For additional information see Note 1H on page 32.

Table 4 shows the District's cash and investment by fund for the fiscal years ended June 30, 2016, 2015 and 2014:

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

**Table 4**

Cash and Investment by Fund

Water and Wastewater

June 30, 2016 and 2015

(In thousands)

	<b>Water System</b>		<b>Wastewater System</b>		<b>Total</b>		<b>Increase (decrease)</b>	
	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>Amount</b>	<b>%</b>
Unrestricted cash and investment								
Operating reserves:								
Rate stabilization fund	\$ 95,000	95,000	24,090	24,090	119,090	119,090	—	0%
Working capital reserve	62,100	61,700	16,400	15,800	78,500	77,500	1,000	1%
Self-insurance	5,000	5,000	1,700	1,700	6,700	6,700	—	0%
Workers compensation	3,200	3,200	600	600	3,800	3,800	—	0%
Total operating reserves	<u>165,300</u>	<u>164,900</u>	<u>42,790</u>	<u>42,190</u>	<u>208,090</u>	<u>207,090</u>	<u>1,000</u>	<u>0%</u>
Capital reserves:								
Reserved for capital projects	168,768	262,074	23,884	30,239	192,652	292,313	(99,661)	(34)%
Reserve funded CIP - Wastewater	—	—	14,530	14,472	14,530	14,472	58	0%
Vehicle replacements	5,300	7,600	—	—	5,300	7,600	(2,300)	(30)%
Equipment replacements	1,063	157	5,779	4,858	6,842	5,015	1,827	36%
Total capital reserves	<u>175,131</u>	<u>269,831</u>	<u>44,193</u>	<u>49,569</u>	<u>219,324</u>	<u>319,400</u>	<u>(100,076)</u>	<u>(31)%</u>
Total Unrestricted cash and investment	<u>340,431</u>	<u>434,731</u>	<u>86,983</u>	<u>91,759</u>	<u>427,414</u>	<u>526,490</u>	<u>(99,076)</u>	<u>(19)%</u>
Restricted Cash and Investments								
Bond interest and redemption fund	5	796	18	87	23	883	(860)	(97)%
Debt service reserve fund	12,726	12,672	—	—	12,726	12,672	54	0%
Funds received for construction	30,243	26,709	—	—	30,243	26,709	3,534	13%
FERC partnership fund	2,201	2,225	—	—	2,201	2,225	(24)	(1)%
Monetary reserve	535	534	—	—	535	534	1	0%
Total restricted cash and investments	<u>45,710</u>	<u>42,936</u>	<u>18</u>	<u>87</u>	<u>45,728</u>	<u>43,023</u>	<u>2,705</u>	<u>6%</u>
Total District Cash and Investments	<u>\$ 386,141</u>	<u>477,667</u>	<u>87,001</u>	<u>91,846</u>	<u>473,142</u>	<u>569,513</u>	<u>(96,371)</u>	<u>(17)%</u>

Cash and Investment by Fund

Water and Wastewater

June 30, 2015 and 2014

(In thousands)

	<b>Water System</b>		<b>Wastewater System</b>		<b>Total</b>		<b>Increase (decrease)</b>	
	<b>2015</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>	<b>Amount</b>	<b>%</b>
Unrestricted cash and investment								
Operating reserves:								
Rate stabilization fund	\$ 95,000	85,000	24,090	17,590	119,090	102,590	16,500	16%
Working capital reserve	61,700	59,200	15,800	15,200	77,500	74,400	3,100	4%
Self-insurance	5,000	5,000	1,700	1,700	6,700	6,700	—	0%
Workers compensation	3,200	3,200	600	600	3,800	3,800	—	0%
Total operating reserves	<u>164,900</u>	<u>152,400</u>	<u>42,190</u>	<u>35,090</u>	<u>207,090</u>	<u>187,490</u>	<u>19,600</u>	<u>10%</u>
Capital reserves:								
Reserved for capital projects	262,074	174,307	30,239	36,836	292,313	211,143	81,170	38%
Reserve funded CIP - Wastewater	—	—	14,472	14,430	14,472	14,430	42	0%
Vehicle replacements	7,600	4,625	—	—	7,600	4,625	2,975	64%
Equipment replacements	157	310	4,858	4,907	5,015	5,217	(202)	(4)%
Total capital reserves	<u>269,831</u>	<u>179,242</u>	<u>49,569</u>	<u>56,173</u>	<u>319,400</u>	<u>235,415</u>	<u>83,985</u>	<u>36%</u>
Total Unrestricted cash and investment	<u>434,731</u>	<u>331,642</u>	<u>91,759</u>	<u>91,263</u>	<u>526,490</u>	<u>422,905</u>	<u>103,585</u>	<u>24%</u>
Restricted Cash and Investments								
Bond interest and redemption fund	796	848	87	109	883	957	(74)	(8)%
Debt service reserve fund	12,672	29,368	—	2,538	12,672	31,906	(19,234)	(60)%
Funds received for construction	26,709	27,447	—	2,214	26,709	29,661	(2,952)	(10)%
FERC partnership fund	2,225	2,247	—	—	2,225	2,247	(22)	(1)%
Monetary reserve	534	534	—	—	534	534	—	0%
ABAG program restricted fund	—	25	—	—	—	25	(25)	(100)%
Total restricted cash and investments	<u>42,936</u>	<u>60,469</u>	<u>87</u>	<u>4,861</u>	<u>43,023</u>	<u>65,330</u>	<u>(22,307)</u>	<u>(34)%</u>
Total District Cash and Investments	<u>\$ 477,667</u>	<u>392,111</u>	<u>91,846</u>	<u>96,124</u>	<u>569,513</u>	<u>488,235</u>	<u>81,278</u>	<u>17%</u>

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

### Capital Contributions

Capital contributions primarily consist of System Capacity Charges (SCC) and Seismic Improvement Program (SIP) surcharges. Additionally, the District receives contributions when the District's facilities need to be relocated during construction projects. The District also receives state and federal grants to fund capital projects.

The Water System's SCC consists of charges collected from all applicants who request a new water service connection or a larger water meter size, and varies depending on geographic region. The SCC pays for the applicant's share of the capital facilities, including those that serve the entire water system such as the aqueducts and raw water facilities, regional facilities such as treatment plants and distribution facilities, and future water supply upgrades needed to meet long-term increases in water demand created by new customers. The portion of the SCC that pays for the future water supply is restricted and the remainder is unrestricted.

The Wastewater System's Capacity Fee is treated as unrestricted funds and pays for the share of Wastewater facilities attributed to new customers.

The Seismic Improvement Program (SIP) surcharge was implemented in 1994 to fund the District's SIP. The object of the program was to ensure that water service would be available after a seismic event to meet fire safety needs and to provide continued service to residential, commercial and industrial customers. The charge was anticipated to be in place through February 2025, but as a result of lower than expected construction costs, lower than expected financing costs, and higher revenues than anticipated, by the end of fiscal year 2015 the District has collected sufficient funds from the SIP surcharge to cover project costs. Accordingly, fiscal year 2015 was the last year that the District levied the seismic surcharge. No seismic surcharge revenues are being budgeted for fiscal year 2016 or fiscal year 2017.

System capacity charges increased by \$10 million due to rising development activities as the housing industry continues its rebound from the most recent recession.

Table 5 shows the District's capital contributions received for the fiscal years ended June 30, 2016, 2015 and 2014:

**Table 5**  
Capital Contributions  
Water and Wastewater  
June 30, 2016 and 2015  
(In thousands)

	<b>Water System</b>		<b>Wastewater System</b>		<b>Total</b>		<b>Increase (decrease)</b>	
	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>	<b>Amount</b>	<b>%</b>
System capacity charges	\$ 39,321	29,725	3,142	2,786	42,463	32,511	9,952	31%
Earned contributions on construction	17,045	17,083	747	—	17,792	17,083	709	4%
Seismic improvement surcharge	33	22,164	—	—	33	22,164	(22,131)	(100)%
Grants and other reimbursements	4,392	2,557	324	281	4,716	2,838	1,878	66%
<b>Totals</b>	<b>\$ 60,791</b>	<b>71,529</b>	<b>4,213</b>	<b>3,067</b>	<b>65,004</b>	<b>74,596</b>	<b>(9,592)</b>	<b>(13)%</b>

Capital Contributions  
Water and Wastewater  
June 30, 2015 and 2014  
(In thousands)

	<b>Water System</b>		<b>Wastewater System</b>		<b>Total</b>		<b>Increase (decrease)</b>	
	<b>2015</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>	<b>Amount</b>	<b>%</b>
System capacity charges	\$ 29,725	20,365	2,786	806	32,511	21,171	11,340	54%
Earned contributions on construction	17,083	5,240	—	—	17,083	5,240	11,843	226%
Seismic improvement surcharge	22,164	22,682	—	—	22,164	22,682	(518)	(2)%
Grants and other reimbursements	2,557	752	281	386	2,838	1,138	1,700	149%
<b>Totals</b>	<b>\$ 71,529</b>	<b>49,039</b>	<b>3,067</b>	<b>1,192</b>	<b>74,596</b>	<b>50,231</b>	<b>24,365</b>	<b>49%</b>

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

### CAPITAL ASSETS

Table 6 shows the District's capital assets for the fiscal years ended June 30, 2016, 2015 and 2014:

**Table 6**

Capital Assets, Net of Depreciation

Water and Wastewater

June 30, 2016 and 2015

(In thousands)

	Water System		Wastewater System		Total		Increase/(decrease)	
	2016	2015	2016	2015	2016	2015	Amount	%
Structures, buildings, and equipment	\$ 3,434,454	3,316,559	608,946	595,549	4,043,400	3,912,108	131,292	3.4%
Land and rights of way	58,733	58,445	21,191	21,017	79,924	79,462	462	0.6%
Construction work in progress	302,973	309,445	63,405	65,019	366,378	374,464	(8,086)	(2.2)%
Totals	<u>\$ 3,796,160</u>	<u>3,684,449</u>	<u>693,542</u>	<u>681,585</u>	<u>4,489,702</u>	<u>4,366,034</u>	<u>123,668</u>	2.8%

Capital Assets, Net of Depreciation

Water and Wastewater

June 30, 2015 and 2014

(In thousands)

	Water System		Wastewater System		Total		Increase/(decrease)	
	2015	2014	2015	2014	2015	2014	Amount	%
Structures, buildings, and equipment	\$ 3,316,559	3,269,155	595,549	597,687	3,912,108	3,866,842	45,266	1.2%
Land and rights of way	58,445	55,274	21,017	20,231	79,462	75,505	3,957	5.2%
Construction work in progress	309,445	243,219	65,019	59,062	374,464	302,281	72,183	23.9%
Totals	<u>\$ 3,684,449</u>	<u>3,567,648</u>	<u>681,585</u>	<u>676,980</u>	<u>4,366,034</u>	<u>4,244,628</u>	<u>121,406</u>	2.9%

The District had \$4.5 billion (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2016. Total capital assets were \$4.4 billion as of June 30, 2015. The investment in capital assets includes land, buildings, improvements, water treatment plants, filter plants, aqueducts, water transmission and distribution mains, water storage facilities, pump stations, water reclamation facilities, wastewater and wet weather treatment facilities, machinery and equipment (*see Table 6 above*). In the current fiscal year, capital assets increased by \$124 million or 2.8% over the prior fiscal year. In fiscal year 2015, capital assets increased \$121 million or 2.9% over fiscal year 2014. Annual changes are consistent with the District's capital improvement program.

## EAST BAY MUNICIPAL UTILITY DISTRICT

### Management's Discussion and Analysis

June 30, 2016

The Water System had \$3.8 billion (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2016. The investment in capital assets includes land, buildings, improvements, water treatment plants, filter plants, aqueducts, water transmission and distribution mains, water storage facilities, power generation, pump stations, water reclamation facilities, machinery and equipment.

The Wastewater System had \$694 million (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2016. The investment in capital assets includes land, buildings, improvements, power generation, wastewater and wet weather treatment facilities, machinery and equipment.

The District's net revenue, long-term debt, and contributions from customers are used to finance capital investments. More detailed information about the District's capital assets is presented in Note 3 to the basic financial statements.

This year's major capital expenditures included:

#### **Water System:**

Pipeline Infrastruct Renewals	\$	42,445
Pumping Plant Rehabilitation		39,044
Treatment Plant Upgrades		25,540
Reservoir Rehab/Maintenance		20,753
Summit Pressure Zone Improve		17,502
Addl Supplemental Supply Projs		16,989
SRV Recycled Water Program		13,312
Dam Seismic Upgrades		9,605
Water Conservation Project		7,102
WTTIP WTP Improvements		6,460
Pipeline Relocations		6,249
Pardee/Cam Rec Areas Impr Plan		5,947
Raw Water Studies and Improves		5,930
Large Diameter Pipelines		5,749
West of Hills Transmission		4,569
Srvc Latl Repl Polybutylene		4,355
Open Cut Reservoir Rehab		4,148
East Bayshore		3,957
Distribution System Upgrades		3,679
Reservoir Tower Modifications		3,581

#### **Wastewater System:**

Wood St Sewer Intercept Rehab	\$	20,382
Treatment Plant Infrastructure		7,904
Resource Recovery Project		6,582
PGS Expansion		5,821
Infiltration/Inflow Contrl Prj		4,695
Digester Upgrade		3,553
DCS Upgrade		3,162
Routine Cap Equip Replacement		1,739
MWWTP Master Plan		1,601
Odor Control Improvements		1,184
PS Q FM Dual-Mode Operation		1,109

# EAST BAY MUNICIPAL UTILITY DISTRICT

## Management's Discussion and Analysis

June 30, 2016

### DEBT ADMINISTRATION

The District had total long-term debt outstanding of \$3.2 billion as of June 30, 2016, a 2% decrease from June 30, 2015. Total long-term debt outstanding was \$3.3 billion as of June 30, 2015, a 5% increase from June 30, 2014. Components of the District's long-term debt portfolio as of June 30, 2016 are:

- The Water System had total long-term debt outstanding of \$2.8 billion.
- The Wastewater System had total long-term debt outstanding of \$431 million.

Table 7 shows the District's long-term debt outstanding for the fiscal years ended June 30, 2016, 2015 and 2014:

**Table 7**  
Long -Term Debt  
(Net of Unamortized Costs)  
Water and Wastewater  
June 30, 2016 and 2015  
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2016	2015	2016	2015	2016	2015	Amount	%
General obligation bonds	\$ —	—	7,616	11,500	7,616	11,500	(3,884)	(34)%
Revenue bonds	2,435,000	2,497,539	408,779	419,884	2,843,779	2,917,423	(73,644)	(3)%
Commercial paper	359,800	359,800	15,000	15,000	374,800	374,800	—	0%
Loans	13,957	14,996	—	—	13,957	14,996	(1,039)	(7)%
Totals	<u>\$ 2,808,757</u>	<u>2,872,335</u>	<u>431,395</u>	<u>446,384</u>	<u>3,240,152</u>	<u>3,318,719</u>	<u>(78,567)</u>	<u>(2)%</u>

Long -Term Debt  
(Net of Unamortized Costs)  
Water and Wastewater  
June 30, 2015 and 2014  
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2015	2014	2015	2014	2015	2014	Amount	%
General obligation bonds	\$ —	—	11,500	15,225	11,500	15,225	(3,725)	(24)%
Revenue bonds	2,497,539	2,330,450	419,884	424,748	2,917,423	2,755,198	162,225	6%
Commercial paper	359,800	359,800	15,000	15,000	374,800	374,800	—	0%
Loans	14,996	16,011	—	—	14,996	16,011	(1,015)	(6)%
Totals	<u>\$ 2,872,335</u>	<u>2,706,261</u>	<u>446,384</u>	<u>454,973</u>	<u>3,318,719</u>	<u>3,161,234</u>	<u>157,485</u>	<u>5%</u>

## EAST BAY MUNICIPAL UTILITY DISTRICT

### Management's Discussion and Analysis

June 30, 2016

It is the policy of the District to maintain a reasonable balance between debt and current revenue financing of capital projects. The following targets provide the framework for financing capital projects:

*Debt Service Coverage Ratio:* Maintain an annual revenue bond debt coverage ratio of at least 1.6 times coverage. As of June 30, 2016, the coverage ratio for Water was 1.65 and for Wastewater was 1.98; the overall District's ratio was 1.70.

*Debt-Funded Capital Spending:* Limit debt-funded capital to no more than 65% of the total capital program over each five-year planning period. As of June 30, 2016, the percentage of debt-funded capital spending for Water was 45% and for Wastewater was 40%; the overall District's percentage was 44%.

*Extended Commercial Paper and Un-hedged Variable Rate Debt:* Limit to 25% of outstanding long-term debt. As of June 30, 2016, the percentage of extended commercial paper and un-hedged variable rate debt compared to total outstanding long-term debt for Water was 14% and for Wastewater was 4%; the overall District's percentage was 12%.

The District's credit ratings are outlined in Table 8.

**Table 8**

#### Credit Ratings

#### Water and Wastewater

June 30, 2016

District debt by type	Rating by		
	Standard & Poor's	Moody's Investors Service	Fitch
Water system:			
Fixed Rate Revenue Bonds	AAA	Aa1	AA+
Variable Rate Revenue Bonds			
Long-term Underlying Rating	AAA	Aa1	-
Short-Term Rating	A-1+	VMIG-1	-
Commercial Paper Notes	A-1+	P-1	-
Wastewater system:			
General Obligation Bonds	AAA	Aa1	-
Fixed Rate Revenue Bonds	AAA	Aa2	AA+
Extendable Commercial Paper	A-1+	P-1	F1+

For detail credit rating by bond issue, please visit our website at <http://www.ebmud.com>.

Revenue-supported debt authorization for the District can be approved by the District's Board of Directors, subject to a referendum process. At June 30, 2016, the Water System had \$995 million and the Wastewater System had \$204 million in authorized but unissued revenue bonds.

Additional information on the District's long-term debt can be found in Note 6 to the financial statements.

# **EAST BAY MUNICIPAL UTILITY DISTRICT**

## **Management's Discussion and Analysis**

June 30, 2016

### **REQUEST FOR INFORMATION**

This financial report is designed to provide ratepayers and creditors with a general overview of the District's finances and demonstrate the District's accountability for the monies it receives. If you have any questions about this report or need additional information, please contact: the Controller, Accounting Division, P.O. Box 24055, Oakland, CA 94623-1055 or visit our website at <http://www.ebmud.com>.

EAST BAY MUNICIPAL UTILITY DISTRICT  
BALANCE SHEETS  
JUNE 30, 2016 AND JUNE 30, 2015  
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Totals	
	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015
Current assets:						
Cash and cash equivalents (Note 2)	\$117,885	\$310,786	\$46,087	\$67,022	\$163,972	\$377,808
Investments (Note 2)	222,546	123,945	40,896	24,737	263,442	148,682
Receivables:						
Customer	46,041	37,241	5,693	5,674	51,734	42,915
Interest and other	3,186	2,845	2,129	2,447	5,315	5,292
Materials and supplies	8,084	7,317	-	-	8,084	7,317
Prepaid Insurance	1,100	1,127	-	-	1,100	1,127
Total current assets	398,842	483,261	94,805	99,880	493,647	583,141
Noncurrent assets:						
Restricted cash and investments (Note 2):						
Cash and cash equivalents	40,710	37,936	18	87	40,728	38,023
Investments	5,000	5,000	-	-	5,000	5,000
Total restricted cash and investments	45,710	42,936	18	87	45,728	43,023
Other assets:						
Equity in JPA partnership fund (Note 2I)	236,968	240,049	-	-	236,968	240,049
Other	272	217	283	347	555	564
Total other assets	237,240	240,266	283	347	237,523	240,613
Capital assets (Note 3):						
Structures, buildings, and equipment	5,131,112	4,919,404	1,027,589	991,663	6,158,701	5,911,067
Less accumulated depreciation	(1,696,658)	(1,602,845)	(418,643)	(396,114)	(2,115,301)	(1,998,959)
Subtotal	3,434,454	3,316,559	608,946	595,549	4,043,400	3,912,108
Land and rights-of-way	58,733	58,445	21,191	21,017	79,924	79,462
Construction in progress	302,973	309,445	63,405	65,019	366,378	374,464
Total capital assets, net	3,796,160	3,684,449	693,542	681,585	4,489,702	4,366,034
Total noncurrent assets	4,079,110	3,967,651	693,843	682,019	4,772,953	4,649,670
Total assets	4,477,952	4,450,912	788,648	781,899	5,266,600	5,232,811
Deferred outflows of resources:						
Accumulated decrease in fair value of hedging derivatives (Note 6)	36,720	23,485	-	-	36,720	23,485
Pension related (Note 8G)	95,210	69,049	16,148	11,962	111,358	81,011
Total deferred outflows	131,930	92,534	16,148	11,962	148,078	104,496
Total assets and deferred outflows	\$4,609,882	\$4,543,446	\$804,796	\$793,861	\$5,414,678	\$5,337,307

(Continued)

EAST BAY MUNICIPAL UTILITY DISTRICT  
BALANCE SHEETS  
JUNE 30, 2016 AND JUNE 30, 2015  
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Totals
	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015	June 30, 2015
Current liabilities:					
Current maturities of long-term debt and Commercial Paper (Note 5 & 6)					
Accounts payable and accrued expenses (Note 4)	\$52,860	\$49,260	\$13,655	\$13,000	\$66,515
Current reserve for claims (Note 9)	77,375	69,218	10,322	9,119	87,697
Accrued interest	8,785	7,814	856	900	9,641
	9,584	9,279	1,685	1,757	11,269
Total current liabilities	148,604	135,571	26,518	24,776	175,122
Noncurrent liabilities:					
Advances for construction	10,558	7,061	-	-	10,558
OPEB liabilities (Note 8)	21,459	20,034	3,863	3,617	25,322
Reserve for claims (Note 9)	32,807	29,184	5,329	5,601	38,136
Net pension liability (Note 8G)	393,304	364,956	69,555	66,363	462,859
Other liabilities	11,527	14,133	6,124	6,074	17,651
Long-term liabilities, net of current maturities (Note 5 & 6)	2,755,897	2,823,075	417,740	433,384	3,173,637
Total noncurrent liabilities	3,225,552	3,258,443	502,611	515,039	3,728,163
Total liabilities	3,374,156	3,394,014	529,129	539,815	3,903,285
Deferred inflows of resources					
Derivative instrument (Note 6)	36,720	23,485	-	-	36,720
Pension related (Note 8G)	67,593	88,483	14,780	17,859	82,373
Total deferred inflows	104,313	111,968	14,780	17,859	119,093
Total liabilities and deferred inflows	3,478,469	3,505,982	543,909	557,674	4,022,378
Net position (Note 7):					
Net investment in capital assets	987,402	812,113	262,147	235,202	1,249,549
Restricted for construction (Note 1G)	19,685	19,647	-	-	19,685
Restricted for debt service (Note 1G)	12,731	13,468	18	87	12,749
Restricted for JPA	236,968	240,049	-	-	236,968
Restricted - other (Note 1G)	2,736	2,759	-	-	2,736
Unrestricted	(128,109)	(50,572)	(1,278)	898	(129,387)
Total net position	1,131,413	1,037,464	260,887	236,187	1,392,300
Total liabilities, deferred inflows and net position	\$4,609,882	\$4,543,446	\$804,796	\$793,861	\$5,414,678
					\$5,337,307

See accompanying notes to financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT  
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total
	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015	June 30, 2016
Operating revenue:					
Water	\$421,240	\$362,136	-	-	\$421,240
Sewer	-	-	\$77,542	\$76,417	77,542
Power	3,525	2,210	1,246	1,093	4,771
Wet weather facilities charges	-	-	21,918	21,809	21,918
Total operating revenue	424,765	364,346	100,706	99,319	525,471
Operating expense:					
Raw water	64,386	43,538	-	-	64,386
Water treatment and distribution	106,484	100,015	-	-	106,484
Recreation areas, net	5,581	5,294	-	-	5,581
Sewer lines and pumping	-	-	13,407	13,943	13,407
Sewer treatment plant operations	-	-	33,292	32,478	33,292
Customer accounting and collecting	16,595	17,351	2,515	2,518	19,110
Financial and risk management	19,041	18,560	607	748	19,648
Facilities management	6,329	6,858	-	-	6,329
General administration	42,320	37,231	7,366	8,461	49,686
Pension expense	(18,703)	(17,212)	(4,073)	(3,384)	(22,776)
Depreciation on utility plant and vehicle	97,262	94,111	22,529	24,198	119,791
Total operating expense	339,295	305,746	75,643	78,962	414,938
Net operating income	85,470	58,600	25,063	20,357	110,533
Nonoperating income (expense):					
Investment income	2,183	3,568	492	242	2,675
Taxes and subventions	29,869	27,922	7,939	8,468	37,808
Interest and amortization of bond expenses, net of capitalized interest of \$9,841 and \$9,210 for the Water System and \$1,445 and \$1,705 for the Wastewater System in 2016 and 2015, respectively	(92,624)	(99,306)	(16,716)	(25,041)	(109,340)
Increase (decrease) of equity in JPA partnership fund	(3,081)	(360)	-	-	(3,081)
Other income	11,341	13,782	3,709	4,387	15,050
Total nonoperating income (expense), net	(52,312)	(54,394)	(4,576)	(11,944)	(56,888)
Income (loss) before capital contributions	33,158	4,206	20,487	8,413	53,645
Capital contributions	60,791	71,529	4,213	3,067	65,004
Change in net position	93,949	75,735	24,700	11,480	118,649
Total net position - beginning	1,037,464	1,363,331	236,187	300,351	1,273,651
Prior period adjustment per implementation of GASB 68 (Note 1R)	-	(401,602)	-	(75,644)	-
Total net position - ending	\$1,131,413	\$1,037,464	\$260,887	\$236,187	\$1,392,300

See accompanying notes to financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total
	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015	June 30, 2015
Cash flows from operating activities					
Cash received from customers	\$415,965	\$369,014	\$100,687	\$99,157	\$468,171
Cash received from other income	11,341	13,782	3,709	4,387	18,169
Cash payments for judgments and claims	(7,787)	(6,516)	(195)	(245)	(6,761)
Cash payments to suppliers for goods and services	(61,081)	(50,715)	(25,467)	(27,523)	(78,238)
Cash payments to employees for services	(162,582)	(155,298)	(27,679)	(27,918)	(183,216)
Net cash provided by operating activities	195,856	170,267	51,055	47,858	218,125
Cash flows from noncapital financing activities:					
Tax receipts	29,869	27,922	7,939	8,468	36,390
Net cash provided by financing activities	29,869	27,922	7,939	8,468	36,390
Capital and related financing activities:					
Capital contributions	60,791	71,529	4,213	3,067	74,596
Proceeds from advances for construction	3,497	(789)	-	-	(789)
Proceeds from sale of capital assets	776	2,870	42	-	818
Net proceeds and premiums from sale of bonds	-	746,871	-	208,103	954,974
Acquisition and construction of capital assets	(228,474)	(232,709)	(36,667)	(30,267)	(262,976)
Change in Investment in JPA	-	(149)	-	-	(149)
Principal retirement on long-term debt and commercial paper	(63,578)	(562,125)	(14,989)	(198,255)	(760,380)
Amount paid to refunding bond escrow agent	-	(15,301)	-	(17,310)	(32,611)
Costs and discounts from issuance on long-term debt	-	(3,371)	-	(1,127)	(4,498)
Interest paid on long-term debt	(92,319)	(123,130)	(16,788)	(25,095)	(148,225)
Net cash provided by (used in) capital and related financing activities	(319,307)	(116,304)	(64,189)	(60,884)	(177,188)
Cash flows from investing activities:					
Proceeds from securities	260,095	405,396	27,142	23,526	428,922
Expenditures from purchases of securities	(358,695)	(318,171)	(43,301)	(23,714)	(341,885)
Interest received on investments	2,055	3,671	350	279	3,950
Net cash provided by (used in) investing activities	(96,545)	90,896	(15,809)	91	90,987
Net increase (decrease) in cash and cash equivalents	(190,127)	172,781	(21,004)	(4,467)	168,314
Cash and cash equivalents:					
Beginning of year	348,722	175,941	67,109	71,576	247,517
End of period	\$158,595	\$348,722	\$46,105	\$67,109	\$415,831

(Continued)

EAST BAY MUNICIPAL UTILITY DISTRICT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total
	June 30, 2016	June 30, 2015	June 30, 2016	June 30, 2015	June 30, 2015
Reconciliation of net operating income to net cash provided by operating activities:					
Net operating income	\$85,470	\$58,600	\$25,063	\$20,357	\$78,957
Adjustments to reconcile net operating income to net cash provided by operating activities:					
Pension expense	(18,703)	(17,212)	(4,073)	(3,384)	(20,596)
Depreciation on utility plant and vehicle	97,262	94,111	22,529	24,198	118,309
Depreciation within recreation areas	1,223	1,396	-	-	1,396
Amortization	17,501	17,531	2,139	1,463	18,994
Other income	11,341	13,782	3,709	4,387	18,169
Changes in assets/liabilities:					
Materials and supplies	(767)	(1,140)	-	-	(1,140)
Prepaid insurance	27	6	-	-	6
Customer receivables	(8,800)	4,668	(19)	(162)	4,506
Other assets	(268)	(757)	524	(435)	(1,192)
OPEB liability	1,425	1,671	246	295	1,966
Reserve for claims	4,594	(1,030)	(316)	1,132	102
Accounts payable and accrued expenses	5,551	(1,359)	1,253	7	(1,352)
Net cash provided by operating activities	\$195,856	\$170,267	\$51,055	\$47,858	\$246,911
Schedule of Non-Cash Activities					
Change in Fair Value	(\$311)	(\$298)	\$42	(\$90)	(\$388)

See accompanying notes to financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT  
STATEMENTS OF FIDUCIARY NET POSITION  
FIDUCIARY FUND - PENSION AND OTHER EMPLOYEE BENEFIT TRUST  
(COMPONENT UNIT)  
JUNE 30, 2016 AND 2015  
(DOLLARS IN THOUSANDS)

	<u>2016</u>	<u>2015</u>
Assets:		
Cash and investments (Note 2)	\$40,657	\$30,214
Invested securities lending collateral (Note 2)	119,265	108,548
Receivables:		
Contributions	4,551	3,854
Interest and other	3,681	8,302
Prepaid insurance	502	495
Retirement system investments, at fair value (Note 2)		
U.S. government obligations	83,039	73,600
Municipal bonds	2,367	2,250
Domestic corporate bonds	150,784	160,942
International bonds	20,257	18,181
Domestic stocks	854,501	826,471
International stocks	183,577	220,157
Real estate	<u>83,140</u>	<u>73,949</u>
Total Investments	<u>1,377,665</u>	<u>1,375,550</u>
Total assets	<u>1,546,321</u>	<u>1,526,963</u>
Liabilities:		
Accounts payable and accrued expenses	1,755	1,688
Retirement system liabilities	7,172	9,518
Securities lending collateral (Note 2)	<u>119,265</u>	<u>108,548</u>
Total liabilities	<u>128,192</u>	<u>119,754</u>
Net position:		
Held in trust for pension benefits	1,391,771	1,383,053
Held in trust for post-employment healthcare benefits	<u>26,358</u>	<u>24,156</u>
Total net position	<u>\$1,418,129</u>	<u>\$1,407,209</u>

See accompanying notes to basic financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT  
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION  
FIDUCIARY FUND - PENSION AND OTHER EMPLOYEE BENEFIT TRUST  
(COMPONENT UNIT)  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(DOLLARS IN THOUSANDS)

	<u>2016</u>	<u>2015</u>
Additions:		
Contributions		
Employer	\$74,672	\$73,141
Plan members	<u>14,925</u>	<u>13,427</u>
Total contributions	<u>89,597</u>	<u>86,568</u>
Investment income:		
Net appreciation (depreciation) in fair value of investments		
Traded securities	(10,122)	38,801
Real estate	2,646	2,292
Interest	5,879	4,330
Dividends	19,346	18,768
Real estate operating income, net	<u>1,098</u>	<u>1,056</u>
Total investment income	18,847	65,247
Less:		
Investment expense	(4,293)	(4,916)
Borrowers' rebates and other agent fees on securities lending transactions	<u>(349)</u>	<u>(105)</u>
Net investment income	<u>14,205</u>	<u>60,226</u>
Total additions, net	<u>103,802</u>	<u>146,794</u>
Deductions:		
Benefits paid	91,152	84,981
Refund of contributions	419	203
Administrative expenses	<u>1,311</u>	<u>1,289</u>
Total deductions	<u>92,882</u>	<u>86,473</u>
Change in net position	10,920	60,321
Net position:		
Beginning of year	<u>1,407,209</u>	<u>1,346,888</u>
End of year	<u><u>\$1,418,129</u></u>	<u><u>\$1,407,209</u></u>

See accompanying notes to basic financial statements

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES</b>
--

***A. Description of the Primary Government***

The East Bay Municipal Utility District (the District) was formed in May 1923 under the provisions of the Municipal Utility District Act of 1921, as amended in 1941. The District is comprised of two financially independent entities: the Water System and the Wastewater System. These two entities are governed by the same elected seven-member Board of Directors which determines such matters as rates and charges for services, approval of contracts, and District policies. The Water System provides administrative and other support services to the Wastewater System. These costs are charged to the Wastewater System.

***B. Description of the Component Unit***

The District's Employees' Retirement System (the Employees' Retirement System or the Plan) has been reported as a Pension and Other Employee Benefit Trust fund (a fiduciary fund) in the accompanying basic financial statements and is discretely presented. The System provides retirement, disability, survivorship, and post-employment health insurance benefits for eligible directors, officers, and employees of the District. The System is administered by a Retirement Board composed of three members appointed by the Board of Directors of the District, two members elected by and from the active membership, and one (nonvoting) member elected by and from the retired membership of the System. Retirement Ordinance No. 40 (Ordinance) assigns the authority to establish Plan benefit provisions to the District's Board of Directors.

Copies of the audited financial statements of the Employees' Retirement System may be obtained by writing to the Controller, P.O. Box 24055, Oakland, CA 94623 or visit our website at <http://www.ebmud.com>.

***C. Basis of Presentation***

The accounts of the District are organized and operated on a fund basis. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows, liabilities, deferred inflows, net position, revenues, and expenses.

The basic financial statements include prior year comparative information. A complete presentation of the prior year information can be found in the District's financial statements for the year ended June 30, 2015.

The District reports the following major proprietary (enterprise) funds:

The **Water System** is engaged in the collection, transmission, and distribution of water to communities within Alameda and Contra Costa counties of California.

The **Wastewater System** is engaged in the interception and treatment of wastewater from residences and industries in the California communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District.

Additionally, the District reports the following fiduciary fund:

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

The **Pension and Other Employee Benefit Trust** is used to account for the resources held by the Employees' Retirement System which provides retirement, disability, and survivorship benefits for eligible directors, officers, and employees of the District.

Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges. The Pension and Other Employee Benefit Trust fund is maintained to account for assets held by the Employees' Retirement System in a trustee capacity.

***D. Basis of Accounting***

Proprietary funds and the Pension and Other Employee Benefit Trust fund are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets, deferred outflows, liabilities and deferred inflows associated with operations are included on the balance sheet, and revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Proprietary funds distinguish *operating* revenues and expenses from *non-operating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the District are charges to customers for sales and services. The District also recognizes wet weather facilities charges as operating revenue. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, then unrestricted resources as they are needed.

In addition, the accounting policies of the District conform to accounting policies generally accepted in the United States of America for water utilities. The accounts are maintained substantially in accordance with the Uniform System of Accounts for Water Utilities followed by investor-owned and major municipally owned water utilities.

***Balance Sheet*** – The balance sheet is designed to display the financial position of the District. The District's fund equity is reported as net position, which is broken down into three categories defined as follows:

- Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets and related deferred inflows and outflows.
- Restricted – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or law or regulations of other governments. It also pertains to constraints imposed by law or constitutional provisions or enabling legislation.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

- Unrestricted – This component of net position consists of net assets that do not meet the definition of “restricted” or “net investment in capital assets.”

***Statement of Revenues, Expenses, and Changes in Net Position*** – The statement of revenues, expenses, and changes in net position is the operating statement for proprietary funds. Revenues are reported by major source. This statement distinguishes between operating and non-operating revenues and expenses and presents a separate subtotal for operating revenues, operating expenses, and other income.

***E. Use of Estimates and Assumptions***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that 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 could differ from those estimates.

***F. Capital Assets***

**Utility Plant – at Original Cost**

The cost of additions to utility plant and replacement of retired units of property are capitalized. Cost includes material, direct labor and fringe benefits, transportation, and such indirect items as engineering, supervision, and interest during construction based on the interest rate on outstanding debt of the system in the prior fiscal year as allowed by GASB 76. Repairs, maintenance, and minor purchases of equipment are charged to expenses as incurred.

The depreciated cost of capital assets, plus removal costs, less salvage, is charged to expense upon retirement.

**Water Supply Management Program**

Costs incurred in this program are debt funded and capitalized in construction in progress. These costs are transferred to utility plant upon completion of the project and depreciated over their useful life. Debt service costs on the debt used to finance the program are recovered in future through connection fees and rates and charges for service to those benefiting from the program.

**Preliminary Survey and Investigation Costs**

The District capitalizes initial costs incurred to study and evaluate certain potential long-term capital projects. These costs are transferred to property, plant and equipment upon completion of the project and are depreciated over the life of the asset. In the event the project is abandoned, these costs are expensed.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

**Contract Water Rights**

The District has contracted with the U.S. Bureau of Reclamation for water deliveries from the Central Valley Project (CVP) through February 2046 (Long Term Renewal Contract), with the anticipation of subsequent renewals of 40 year terms. Payments under the contract include reimbursement based on the amounts of water delivered to EBMUD of capital costs for CVP storage and conveyance facilities (EBMUD's current allocation is \$2,843) and the Operation & Maintenance Deficit (EBMUD's current balance is \$6,781). The Water Enterprise Fund capitalized the two components.

**G. Depreciation**

Depreciation of capital assets is computed on a straight-line basis using the estimated service lives of the related assets (5 to 100 years).

**H. Restricted Assets**

The District segregates cash and investments into funds that are "Restricted" and "Unrestricted." Funds are "restricted" when limitations on use of the resources are imposed by creditors, grantors, contributors, laws or regulations of other governments, or imposed by law through constitutional provision or by enabling legislation. "Unrestricted" resources are committed by the Board of Directors through the passage of a resolution, or constrained for a specific purpose by committees or officials with authority delegated by the Board. The exception is the Reserve for Capital Projects which is anticipated but not committed or constrained to be used for the District's capital improvement program.

Unrestricted cash and investments are further categorized into Operating and Capital Reserves:

*Operating Reserves:*

- Rate Stabilization Fund (RSF) reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain at least 20% of projected annual water volume revenues for Water and at least 5% of annual operating and maintenance expenses for Wastewater. Funding of the RSF is consistent with the District's Bond indentures. In fiscal year 2014, the District combined the Rate Stabilization Fund referenced in the Bond indentures and the Contingency and Rate Stabilization Reserve referenced in Policy 4.02 into a single Rate Stabilization Fund reserve to enhance transparency.
- Working Capital reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain at least three times the District's monthly net operating and maintenance expenses.
- Self-insurance reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain 1.25 times the expected annual costs.
- Workers' compensation reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain a level equal to the estimated future liability for workers' compensation claims.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

*Capital Reserves:*

- Reserve for Capital Projects comprises the resources available for cash funding of the District's capital improvement program as projected in conjunction with the biennial budget.
- Reserve Funded CIP (Wastewater) balance is a specific designation [Board Motion No. 029-94] used to fund wet and dry weather eligible construction projects.
- Vehicle Replacement Fund [Board Motion No. 030-94] is financed by deposits based on internal user rate charges, and used to reimburse operational expenditures and vehicle replacement purchases.
- Equipment Replacement Fund was established by the District with the implementation of the Wastewater Capacity Fees effective July 1, 1984. The balance in this account represents funds set aside for future wastewater department equipment replacements.

Restricted funds include the following:

- Debt funded construction funds are the proceeds of bond or commercial paper issues that are restricted for use on eligible projects in the District's capital program. The current year balance is \$0 for Water and Wastewater.
- Capitalized Interest fund is restricted by the District's bond indenture for the purpose of defraying that bond issue's debt service payments for a specified period. The current year balance is \$0 for Water and Wastewater.
- Bond Interest and Redemption fund is required, under the District's bond indentures, in order for the District to transfer funds to the Trustee for the payment of principal and interest on the outstanding bonds one business day prior to the date such payment is due. The District uses the Bond Interest and Redemption Fund to segregate funds accumulated for such payments. In addition, under certain of the interest rate swap agreements related to the District's outstanding bonds, the District is required to post collateral to the swap counterparty to the extent that the District's total exposure for termination payments under the swap agreement exceeds the threshold amount specified in the applicable swap agreement. The District also uses the Bond Interest and Redemption Fund to segregate District funds held by the applicable custodian to satisfy this collateral posting obligation. As of June 30, 2016 and 2015, respectively, the balances were \$5 and \$796 for Water, and \$18 and \$87 for Wastewater.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

- Debt Service Reserve fund is created and required to be maintained at a specified level in connection with certain series of the District's outstanding bonds. Amounts in a Bond Reserve Fund may only be used (a) for the payment of principal of and interest on the related series of bonds in the event the District fails to transfer the required payment from the related system Revenue Fund (the respective designated part of the General Fund) (b) for the payment of redemption of all of the related series of bonds then outstanding or (c) for the payment of the final principal and interest payments on the related series of bonds. As of June 30, 2016 and 2015 respectively, the balances were \$12,726 and \$12,672 for Water, and \$0 for Wastewater.
- Funds received for construction reflect advances received from applicants for work to be performed by the District and the unspent future water supply component of system capacity charges. This fund is used for the construction of major facilities, applicant requested services, and the design and construction of water supply improvement program projects. The balance as of June 30, 2016 was \$30,243 for Water (\$19,170 for Future Water Supply projects, \$11,073 for Applicant Work) and \$0 for Wastewater. The balance as of June 30, 2015 was \$26,709 for Water (\$19,087 for Future Water Supply projects, \$7,622 for Applicant Work) and \$0 for Wastewater.
- FERC partnership fund of \$2 million was established January 11, 1999, in compliance with Federal Energy Regulatory Commission (FERC) order which brought resolution to its Mokelumne River Proceeding. The District manages the fund and income derived from investing the funds to provide operating support to the Joint Settlement Agreement with US Fish and Wildlife and California Fish and Game to protect the Mokelumne River Ecosystem from Pardee Reservoir to the Delta. The principal and any unused earnings shall remain the property of the District and will revert to the District upon expiration of the agreement in March 2031 or upon withdrawal of any party to the agreement. As of June 30, 2016 and 2015, respectively, the balances were \$2,201 and \$2,225 for Water.
- Monetary Reserve represents money on deposit in the name of the District with the Automated Power Exchange Inc. (APX) in accordance with the terms and conditions of the Automated Power Exchange Inc. California Master Service Agreement of July 15, 1999, entered between the District and APX for the sale and purchase of electric power. The funds held on deposit shall be withdrawn by the Depository and Clearing Agent in the event that sufficient funds are not deposited in the District settlement account to cover power exchange transactions. As of June 30, 2016 and 2015, respectively, the balances were \$535 and \$534 for Water.

***I. Deferred Amount on Bond Refundings***

Gains and losses incurred in connection with debt refunding transactions are deferred and amortized over the shorter of the life of the refunded debt or the new debt.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**  
**(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

***J. Cash and Cash Equivalents***

For purposes of the statement of cash flows, the District considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents.

***K. District Investments***

Investments are stated at fair value. Included in investment income (loss) is the net change in the fair value of investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) of those investments.

Measurement of the fair value of investments is based upon quoted market prices, if available. The estimated fair value of investments that have no quoted market price is determined based on equivalent yields for such securities or for securities of comparable maturity, quality, and type as obtained from market makers.

Each of the financial instruments invested in by the District represents a potential concentration of credit risk. However, as the portfolio and the components of the various instruments are diversified, and issuers of securities are dispersed throughout many industries and geographic locations, the concentrations of credit risk are limited.

***L. Retirement System Investments***

Investments are reported at fair value. Securities and bonds traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that have no quoted market price are reported at estimated fair value, which is determined based on yields equivalent for such securities or for securities of comparable maturity, quality, and type as obtained from market makers. Measurement of the fair value of real estate investments is estimated by the investment managers and reflects both internal and independent appraisals of real estate properties.

The System presents in the Statements of Changes in Plan Net Position the net change in the fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Each of the financial instruments invested in by the System represents a potential concentration of credit risk. However, as the portfolio and the components of the various instruments are diversified and issuers of securities are dispersed throughout many industries and geographical locations, the concentrations of credit risk are limited.

The System invests in a combination of stocks, bonds, fixed income securities, real estate, and other investment securities. These investments are exposed to various risks, such as interest rate and market risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and those such changes could materially affect the amounts reported in the Statement of Plan Net Position.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**  
**(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

Retirement Board policies permit the System to use investments of the Plan to enter into securities lending transactions, which are loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return collateral for the same securities in the future. The System's securities custodian is an agent in lending the Plan's securities for cash collateral, U.S. government securities, and irrevocable letters of credit of 102% for domestic securities and 105% for international securities lent.

As of June 30, 2016, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. Contracts with the lending agent require them to indemnify the System under certain circumstances if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the System for income distributions by the securities issuers while the securities are on loan. The risk of any loss of collateral or investment of cash collateral (including a loss of income or principal, or loss of market value thereon) lies with the System, except for losses resulting from negligence or intentional misconduct of the agent in performing the duties allocated under the securities lending agreement with respect to collateral. During the year ended June 30, 2016, there were no violations of legal or contractual provisions, and no borrower or lending agent default losses known to the securities lending agent.

In lending securities, cash collateral is invested in the lending agent's short term investment pool, which as of June 30, 2016, had a weighted average maturity of 30 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the System cannot determine. Cash collateral may also be invested separately in term loans, in which case the maturity of the collateral investment generally matches the term of the loan. Noncash collateral cannot be pledged or sold unless the borrower defaults. All securities loans can be terminated on demand by either the lender or the borrower, although the average term of overall loans for the System was approximately 49 days. There are no dividends or coupon payments owing on the securities lent. Cash received as collateral on securities lending transactions is reported as an asset of the System with a corresponding liability. As of June 30, 2016, the fair value of securities on loan was \$117,243. The total cash and noncash collateral held by the System's custodian to secure these securities on loan was valued at \$119,265 (all cash collateral).

***M. Material and Supplies***

Material and supplies inventories are valued at cost, which approximates market, using the average-cost method.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

**NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

***N. Compensated Absences***

Compensated absences as of June 30, 2016, are included on the balance sheet in accounts payable and accrued expenses. In previous years, trends have shown that the District employees utilize the accruals annually, therefore, amounts payable are accrued and reported as a current liability on the financial statements.

The changes in compensated absences were as follows:

	Water System		Wastewater System		Total	
	June 30,	June 30,	June 30,	June 30,	June 30,	June 30,
Beginning Balance	\$26,424	\$23,452	\$4,178	\$4,232	\$30,602	\$27,684
Additions	27,140	28,111	4,669	4,536	31,809	32,647
Payments	(25,966)	(25,139)	(4,556)	(4,590)	(30,522)	(29,729)
Ending Balance	<u>\$27,598</u>	<u>\$26,424</u>	<u>\$4,291</u>	<u>\$4,178</u>	<u>\$31,889</u>	<u>\$30,602</u>

***O. Revenue***

Water billings include charges for water flow, elevation, and a monthly meter charge. Customer water meters are read on a cyclical basis throughout a monthly or bimonthly period. Bills are rendered and revenue is recognized in the period that meters are read.

Wastewater treatment billings are a combination of flow, strength charges, and a monthly service charge. Customer bills are rendered on a cyclical basis throughout a monthly or bimonthly period, and revenue is recognized in the period in which bills are rendered.

Wet weather facilities charges are designed to finance the operating and capital costs related to wet weather sewage flows and are billed annually on the property tax bill.

***P. Interest Rate Swap***

The District enters into interest rate swap agreements to modify interest rates on some outstanding debt. The net interest is recorded in the financial statements annually.

In June 2008, GASB issued Statement No. 53, Accounting and Financial Reporting for Derivative Instruments (GASB 53). The statement specifically requires governments to measure and report most derivative instruments at fair value in their financial statements that are prepared using the economic resources measurement focus and the accrual basis of accounting. The requirement of reporting the derivative instruments at fair value on the face of the basic financial statements gives the users of those statements a clearer look into the risks their governments are sometimes exposed to when they enter into these transactions and how those risks are managed. The statement also addresses hedge accounting requirements and improves disclosures, providing a summary of the government's derivative instrument activity, its objectives for entering into derivative instruments, and their significant terms and risks. The District implemented GASB 53 in fiscal 2010.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

<b>NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
--

***Q. Deferred Outflows/Inflows of Resources***

In addition to assets, the statement of financial position or balance sheet will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position or fund balance that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the statement of financial position or balance sheet will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position or fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

***R. Implementation of Governmental Accounting Standards Board (GASB) Pronouncements***

**GASB Statement No. 72** – In February 2015, the GASB issued Statement No. 72, *Fair Value Measurement and Application*. The intention of this Statement is to enhance the comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. It also enhances fair value application guidance and related disclosures. The provisions of this statement are effective for reporting periods beginning after June 15, 2015, therefore, the District implemented this statement for fiscal year ended June 30, 2016. See Note 1S and 2E for additional information.

***S. Fair Value Measurements***

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels based on the extent to which inputs used in measuring fair value are observable in the market.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are inputs – other than quoted prices included within level 1 – that are observable for an asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for an asset or liability.

If the fair value of an asset or liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**  
**(Dollars in Thousands)**

**NOTE 2 - CASH AND INVESTMENTS**

**A. Classification**

Reconciliations of cash and investments reported on the financial statements as of June 30, 2016, are as follows:

	Water System	Wastewater System	Total
<b><i>District Enterprise Funds:</i></b>			
Cash and investments included in current assets	\$340,431	\$86,983	\$427,414
Cash and investments included in restricted investments	45,710	18	45,728
Total District cash and investments	386,141	87,001	473,142
Less investments	(227,546)	(40,896)	(268,442)
Cash and cash equivalents	\$158,595	\$46,105	\$204,700
	<u>\$158,595</u>	<u>\$46,105</u>	<u>\$204,700</u>
	Pension Plan Benefits	Post-employment Healthcare Benefits	Total
<b><i>System Pension Trust Funds:</i></b>			
Cash and cash equivalents	\$39,927	\$730	\$40,657
Invested securities lending collateral	117,124	2,141	119,265
Retirement system investments	1,352,932	24,733	1,377,665
Total System cash and investments	\$1,509,983	\$27,604	\$1,537,587
	<u>\$1,509,983</u>	<u>\$27,604</u>	<u>\$1,537,587</u>

**B. District Enterprise Fund Investments Authorized by the California Government Code and the District's Investment Policy**

The District's Investment Policy and the California Government Code allow the District to invest in the following, provided the credit ratings of the issuers are acceptable to the District; and approved percentages and maturities are not exceeded. The table below also identifies certain provisions of the California Government Code, or the District's Investment Policy where the District's Investment Policy is more restrictive and provides information as to the limitations as they relate to interest rate risk, credit risk and concentration risk.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015  
(Dollars in Thousands)**

**NOTE 2 - CASH AND INVESTMENTS (Continued)**

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality	Maximum in Portfolio	Maximum Investment In One Issuer
U.S. Treasury Bonds, Notes and Bills	5 Years	N/A	up to 100%	N/A
U.S. Government Agency and U.S. Government-Sponsored Enterprise Obligation	5 Years	N/A	up to 100% \$65,000	40% in each Agency
State of California Local Agency Investment Fund (LAIF Pool)	N/A	N/A	per account	N/A
California Asset Management Program (CAMP)	N/A	A1, P1, or F1	20%	N/A
Money Market Mutual Funds	N/A	AAA	20%	N/A
Time Certificates of Deposits - Banks or Savings and Loans	5 Years	N/A	20%	\$100
Negotiable Certificates of Deposit	5 Years	AA	20%	\$250
Commercial Paper	270 Days	A1, P1, or F1	20%	10%
Medium Term Corporate Notes	5 Years	AA	30%	10%
Repurchase Agreements	270 Days	N/A	20%	N/A
Municipal Bonds	5 Years	AA	40%	20%

The District does not enter into reverse repurchase agreements.

**C. District Enterprise Fund Investments Authorized by Debt Agreements**

The District must maintain required amounts of cash and investments with trustees or fiscal agents under the terms of certain debt issues. These funds are unexpended bond proceeds or are pledged reserves to be used if the District fails to meet its obligations under these debt issues. The California Government Code requires these funds to be invested in accordance with District resolutions, bond indentures or State statutes. The table below identifies the investment types that are authorized for investments held by fiscal agents. The table also identifies certain provisions of these debt agreements:

Authorized Investment Type	Minimum Credit Quality
Repurchase Agreements	Top Four Short term Rating Category
U.S. Treasury Bonds, Notes and Bills	N/A
U.S. Government Agency and U.S. Government-Sponsored Enterprise Obligation	N/A
State Obligations	Not lower than District's bond rating
Commercial Paper	Top Rating Category
Negotiable Certificates of Deposit	FDIC insured or collateralised
Time Certificates of Deposits - Banks or Savings and Loans	FDIC insured or collateralised
Corporate Notes and Bonds	Not lower than District's bond rating
Variable Rate Obligations	Not lower than District's bond rating
Cash Swap Agreements	Top Rating Category
Guaranteed Investment Contract	Not lower than District's bond rating
Shares of Beneficial Interest	Top Rating Category

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 2 - CASH AND INVESTMENTS (Continued)</b>
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***D. Employees Retirement System Authorized Investment Strategy***

The System's investment policies authorize the System to invest in financial instruments in three broad investment categories: equity, fixed income, and real estate. These financial instruments can include, but are not limited to, corporate bonds, commercial paper, U.S. government securities, common and preferred stock, real estate investment trusts, and mutual funds. Fixed income investments may include futures and options contracts in order to provide added flexibility in managing the fixed income portfolio. The following is a summary of the System investment policy adopted by the System with *Resolution No. 6807*.

The Retirement Board is authorized to designate multiple investment managers to manage the assets under their supervision subject to the laws of the State of California and the Investment Guidelines established by the Retirement Board. Allocation of assets to the investment managers shall be determined by the Retirement Board to accommodate changing conditions and laws. The long-range asset allocation goal is as follows:

Core Fixed Income	10%
Non-Core Fixed Income	10%
Domestic Equity	40%
Covered Calls	20%
International Equity	15%
Real Estate	5%
Allocation to Cash	0%

The composite asset allocation goal will be pursued by the Retirement System on a long-term basis and be revised if significant changes occur within the economic and/or capital market environment. Progress toward the goal will be reviewed at least annually.

The Director of Finance is authorized to transfer assets from any asset class which exceeds the long-term asset allocation goal by more than 3% at the end of two or more consecutive quarters, allocating the excess assets to a manager or group of managers with the exception of real estate managers. The Director of Finance is further authorized to withdraw assets from assigned managers as necessary to efficiently meet operating needs.

The equity and fixed income asset allocations may vary by up to  $\pm 5\%$  from the long-range asset allocation goals.

The core fixed income target allocation (10% of the total portfolio) will primarily consist of U.S. denominated fixed income securities. Individual managers may invest up to 20% of their assets in international fixed income securities.

The non-core fixed income target allocation (10% of the total portfolio) will primarily consist of U.S. denominated fixed income securities. Individual managers may invest up to 35% of their assets in international fixed income securities. It is expected that this allocation may have a material allocation to below investment grade securities.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 2 - CASH AND INVESTMENTS (Continued)</b>
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The domestic equity allocation target (40% of the total portfolio) will consist of approximately 37% in large cap market related growth and value (average risk) securities, 3% in small capitalized securities, and 20% in international securities. The international equity allocation target will consist of approximately 17% international equities and 3% emerging markets. It is expected this allocation will allow for exposure to mid cap securities based on tactical decisions by the Retirement Fund's large cap and small cap domestic equity managers.

The covered calls target allocation (20% of the total portfolio) may consist of a combination of Chicago Board Options Exchange S&P 500 BuyWrite Index (the "BXM Index") replication strategy and/or active non-replication strategies and their underlying domestic equity portfolios.

The international equity target allocation (15% of the total portfolio) will consist of approximately 12% in international equities and 3% in emerging markets equities.

The real estate target allocation (5% of the total portfolio) will consist of either equity (ownership) and/or fixed income participation in commercial, industrial, or residential properties. Investments may include interests in mortgages pools secured by loans of underlying properties.

The allocation goal recognizes that at any time equity and fixed income managers may have transactional cash on hand and the District will maintain enough cash as working capital to effectively meet cash flow demands on the system. However, there is no specific allocation for cash as all investable cash is allocated to specific investment disciplines.

Holdings of securities issued by the United States Government or any of its agencies need not be diversified. Securities of any one issuer with maturities of more than one year, other than the United States Government or any of its agencies, shall not exceed 5% of the value of the total portfolio. Securities of any one issuer of foreign government issues shall not exceed 10% of the value of the total portfolio at the time of purchase. Fixed income managers have the authority to make international investments, not to exceed 20% of their total portfolio.

The use of futures and options in the fixed income accounts may be used as part of their portfolio management strategy and will be incidental to their securities trading activities. The resulting aggregate risk profile (volatility) of the portfolio will not be different from that permissible by using securities only.

Short (sold) options positions will generally be hedged, either with current portfolio security holdings, other options or futures options. Mortgage derivatives with significant short option characteristics will not exceed 5% of the portfolio, and will generally be a) offset by positions in other mortgage derivatives, or b) offset by other portfolio positions.

No derivatives will be executed which will increase the value at risk of the portfolio by more than 25 basis points of the portfolio's market value.

Structured notes with significant short options positions or increasing leverage will not be purchased, and in no case will structured notes exceed 5% of portfolio value. Structured notes issued by the U.S. Government (treasuries and agencies) will be considered allowable investments, and are restricted to 25%.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 2 - CASH AND INVESTMENTS (Continued)</b>
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Fixed income managers are authorized to use futures and options contracts to supplement their investment capabilities to provide flexibility in managing the fixed income portfolios and reduce the cost of implementing strategies to respond to changing market conditions without incurring the higher transaction costs associated with buying and selling specific securities. These transactions are authorized to enable the manager to reduce the exposure of the portfolio to interest rate changes by reducing or increasing the duration of the portfolio without selling any of the actual holdings.

No more than 5% of the portfolio will be invested in original futures margin and options premiums, exclusive of any in-the-money portion of the premiums.

Each equity portfolio shall be diversified. When fully invested in equities or at its normal level of investment, a minimum of 20 securities should be held. At no time may a single equity investment exceed 5% of the value of the total retirement fund.

Each international equity portfolio shall be diversified. When fully invested in international equities or at its normal level of investment, a minimum of 20 securities should be held. At no time may a single international equity investment exceed 5% of the value of the total retirement fund.

***E. Fair Value Hierarchy***

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2016:

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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

***District Enterprise Funds:***

Investment Type	Level 1	Level 2	Total
<b>Investments by Fair Value Level:</b>			
U.S. Government-Sponsored Enterprise Agencies:			
Non-callable		\$48,095	\$48,095
Callable		124,587	124,587
United States Treasury Securities	\$30,020		30,020
Corporate Securities		18,683	18,683
Municipal Bonds		13,511	13,511
Negotiable Certificates of Deposit			
Non-callable		33,045	33,045
Callable		252	252
California Local Agency Investment Fund		\$58,123	58,123
	<u>\$30,020</u>	<u>\$296,296</u>	<u>326,316</u>
<b>Total Investments at Fair Value</b>			
	<u>\$30,020</u>	<u>\$296,296</u>	<u>326,316</u>
<b>Investments Measured at Net Asset Value Per Share:</b>			
California Asset Management Program			40,149
<b>Investments Measured at Amortized Cost:</b>			
Demand Deposits and Certificate of Deposit			250
Mutual Funds (U.S. Securities)			<u>50,477</u>
Total Investments			417,192
Cash in banks			<u>55,950</u>
Total District Cash and Investments			<u>\$473,142</u>

Investments classified in Level 1 of the fair value hierarchy, valued at \$30,020 are valued using quoted prices in active markets. Federal agency securities totaling \$172,682, Corporate Securities totaling \$18,683, Municipal Bonds totaling \$13,511, and Certificates of Deposits totaling \$33,297, classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The California Local Agency Investment Fund, classified in Level 2 of the fair value hierarchy, is valued based on the fair value of the underlying assets of the pool.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

***System Pension Trust Fund:***

Investment Type	Level 1	Level 2	Level 3	Total
<b>Investments by Fair Value:</b>				
Asset Backed Securities		\$11,320	\$223	\$11,543
Equity Securities	\$759,712	264,886	88	1,024,686
Collateralized Bonds		411		411
Commercial Mortgage - Backed Securities		6,984		6,984
Commercial Paper		2,280		2,280
Corporate Bonds		111,558		111,558
Government Agencies		26,712		26,712
Government Bonds		33,482		33,482
Government Mortgage - Backed Securities		19,489		19,489
Government Issued				
Commercial Mortgage - Backed Securities		414		414
Index Linked Government Bonds		2,942		2,942
Short Term Investment Funds		11,113		11,113
Municipal Bonds		2,367		2,367
Mutual Funds		563		563
Real Estate			83,140	83,140
Other Fixed Income		39,981		39,981
Total Investments at Fair Value	<u>\$759,712</u>	<u>535,524</u>	<u>\$83,451</u>	<u>1,377,665</u>
California Local Agency Investment Fund		\$1,022		1,022
<b>Investments Measure at Amortized Cost:</b>				
Invested securities lending collateral				119,265
Cash in banks				<u>39,635</u>
Total District Cash and Investments				<u>\$1,537,587</u>

Investments classified in Level 1 of the fair value hierarchy, valued at \$759,712, are valued using quoted prices in active markets. \$535,524 of investments classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The California Local Agency Investment Fund, classified in Level 2 of the fair value hierarchy, is valued based on the fair value of the underlying assets of the pool. Investments totaling \$83,451 classified in Level 3 of the fair value hierarchy are valued using appraisals and estimate by investment managers. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

***F. Interest Rate Risk***

Interest rate risk is the risk that changes in market interest rates will adversely affect the market value of an investment. Normally, the longer the maturity of an investment, the greater the sensitivity of its market value to changes in market interest rates. The District generally manages its interest rate risk by holding investments to maturity.

Information about the sensitivity of the market values of the District's and System's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the District's investments by maturity or earliest call date.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

***District Enterprise Funds:***

Investment Type	12 Months or less	13 to 24 Months	25 to 60 Months	Total
U.S. Government-Sponsored Enterprise Agencies:				
Non-callable	\$26,018	\$12,073	\$10,004	\$48,095
Callable	3,503	12,048	109,036	124,587
United States Treasury Securities	30,020			30,020
Corporate Securities	15,014	3,160	509	18,683
Municipal Bonds	10,298	2,701	512	13,511
Negotiable Certificates of Deposit				
Non-callable	30,028	3,017		33,045
Callable			252	252
Demand Deposits and Certificate of Deposit	250			250
Mutual Funds (U.S. Securities)	50,477			50,477
California Asset Management Program	40,149			40,149
California Local Agency Investment Fund	58,123			58,123
Total Investments	<u>\$263,880</u>	<u>\$32,999</u>	<u>\$120,313</u>	417,192
Cash in banks				<u>55,950</u>
Total District Cash and Investments				<u>\$473,142</u>

***System Pension Trust Fund:***

Investment Type	Less than 12 Months	12 to 72 Months	72 to 120 Months	More than 120 Months	Maturity not Determined	Total
Asset Backed Securities	\$322	\$6,279	\$1,558	\$3,384		\$11,543
Equity Securities	1,024,686					1,024,686
Collateralized Bonds			411			411
Commercial Mortgage - Backed Securities				6,984		6,984
Commercial Paper	2,280					2,280
Corporate Bonds	7,489	43,267	21,442	11,236	\$28,124	111,558
Government Agencies		12,302	7,350	7,060		26,712
Government Bonds	9,846	14,592	7,207	1,837		33,482
Government Mortgage - Backed Securities		1	130	19,358		19,489
Government Issued						
Commercial Mortgage - Backed Securities		414				414
Index Linked Government Bonds	349		1,024	1,569		2,942
Short Term Investment Funds					11,113	11,113
Municipal Bonds				2,367		2,367
Mutual Funds				563		563
Real Estate					83,140	83,140
Other Fixed Income		7,107	1,074		31,800	39,981
Total System Investments	<u>\$1,044,972</u>	<u>\$83,962</u>	<u>\$40,196</u>	<u>\$54,358</u>	<u>\$154,177</u>	<u>\$1,377,665</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

The District and System are participants in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. They report their investment in LAIF at the market value amount provided by LAIF, which is the same as the value of the pool share. The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis. Included in LAIF's investment portfolio are collateralized mortgage obligations, mortgage-backed securities, other asset-backed securities, loans to certain state funds, and floating rate securities issued by federal agencies, government-sponsored enterprises, United States Treasury Notes and Bills, and corporations. On June 30, 2016, these investments matured in an average of 167 days.

The System's investments include the following investments that are highly sensitive to interest rate fluctuations to a greater degree than already indicated above:

Highly Sensitive Investments	Fair Value at Year End
Government Mortgage - Backed Securities	\$19,489
Commercial Mortgage - Backed Securities	6,984
Government Issued Commercial Mortgage - Backed Securities	414

**G. Credit Risk**

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical credit rating organization. Presented below is the actual rating as of June 30, 2016, for each investment type as provided by Moody's.

***District Enterprise Funds:***

Investment Type	Aaa	Aa1	Aa2	Aa3	MIG1	Total
U.S. Government-Sponsored Enterprise Agencies:						
Non-Callable	\$48,095					\$48,095
Callable	124,587					124,587
United States Treasury Securities	30,020					30,020
Corporate Securities	4,669	\$4,559	\$4,453	\$5,002		18,683
Municipal Bonds	779	265	6,467		\$6,000	13,511
Negotiable Certificates of Deposit						
Non-Callable			30,028	3,017		33,045
Mutual Funds (U.S. Securities)	50,477					50,477
Totals	<u>\$258,627</u>	<u>\$4,824</u>	<u>\$40,948</u>	<u>\$8,019</u>	<u>\$6,000</u>	<u>318,418</u>
<i>Not rated:</i>						
Demand Deposits and Certificate of Deposit						250
Negotiable Certificates of Deposit (callable)						252
California Local Agency Investment Fund						58,123
California Asset Management Program						40,149
Cash in Banks						<u>55,950</u>
Total District Cash and Investment						<u>\$473,142</u>

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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

***System Pension Trust Fund:***

Investment Type	Aaa	Aa	A	Baa	Ba	B	U.S. Government Guaranteed	Not Rated	Total
Asset Backed Securities	\$9,211	\$61	\$502	\$507	\$558			\$704	\$11,543
Equity Securities								1,024,686	1,024,686
Collateralized Bonds	411								411
Commercial Mortgage - Backed Securities	4,610		34					2,340	6,984
Commercial Paper								2,280	2,280
Corporate Bonds	1,602	17,416	38,167	22,813	989	\$20		30,551	111,558
Government Agencies	22,976						\$3,736		26,712
Government Bonds	33,482								33,482
Government Mortgage - Backed Securities				255			19,042	192	19,489
Government Issued									
Commercial Mortgage - Backed Securities							414		414
Index Linked Government Bonds	2,942								2,942
Short Term Investment Funds								11,113	11,113
Municipal Bonds		1,798						569	2,367
Mutual Funds	226	4	95					238	563
Real Estate								83,140	83,140
Other Fixed Income								39,981	39,981
Total System Investments	<u>\$75,460</u>	<u>\$19,279</u>	<u>\$38,798</u>	<u>\$23,575</u>	<u>\$1,547</u>	<u>\$20</u>	<u>\$23,192</u>	<u>\$1,195,794</u>	<u>\$1,377,665</u>

***H. Concentration Risk***

Significant District investments in the securities of any individual issuers, other than U. S. Treasury securities, LAIF, and mutual funds, are set forth below:

***District Enterprise Funds:***

Reporting Unit	Issuer	Investment Type	Reported Amount
District-Wide			
	FNMA	Federal Agency Securities	\$68,069
	FHLMC	Federal Agency Securities	58,073
	FHLB	Federal Agency Securities	34,540
	American Express Fed Savings Bank	Negotiable Certificate of Deposit	30,029
Major Funds:			
Water System			
	FNMA	Federal Agency Securities	56,008
	FHLMC	Federal Agency Securities	41,192
	American Express Fed Savings Bank	Negotiable Certificate of Deposit	30,029
	FHLB	Federal Agency Securities	27,535
Wastewater System			
	FHLMC	Federal Agency Securities	16,881
	FNMA	Federal Agency Securities	12,061
	FHLB	Federal Agency Securities	7,005

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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

***System Pension Trust Fund:***

Significant System Pension Trust Fund investments are:

Nature of investment	Fair Value at Year End
Northern Trust Collective Daily Russell 1000 Equity Index Fund	\$237,709

***I. Foreign Currency Risk***

***System Pension Trust Fund:***

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair values of an investment or deposit. Presented below in US dollars is the fair market value of the System's foreign investments at June 30, 2016:

Foreign Currency	Equity Securities Investment Type
Euro	\$54,781
British Pound Sterling	30,300
Hong Kong Dollar	15,305
Japanese Yen	12,816
Swiss Franc	12,185
South Korean Won	7,219
Canadian Dollar	4,892
Danish Krone	4,026
Norwegian Krone	2,412
Singapore Dollar	2,210
Australian Dollar	2,132
Swedish Krona	1,408
Brazilian Real	1,330
Indonesian Rupiah	1,318
Thai Baht	707
Mexican Peso	635
Turkish Lira	535
Total	<u>\$154,211</u>

The Fund's investment policy permits it to invest 20% of total investment on foreign currency-denominated investments. The Fund's current position is 11.2%.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 2 - CASH AND INVESTMENTS (Continued)</b>
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***J. Custodial Credit Risk***

Custodial credit risk for *cash on deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, the District or System will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

California Law requires banks and savings and loan institutions to pledge government securities with a market value of 110% of the District's cash on deposit, or first trust deed mortgage notes with a market value of 150% of the deposit, as collateral for these deposits. Under California Law this collateral is held in a separate investment pool by another institution in the District's name and places the District ahead of general creditors of the institution.

The District and System invest in individual investments and in investment pools. Individual investments are evidenced by specific identifiable *securities instruments*, or by an electronic entry registering the owner in the records of the institution issuing the security, called the *book entry* system. In order to increase security, the District and System employ the Trust Department of a bank or trustee as the custodian of certain District and System managed investments, regardless of their form.

As of June 30, 2016 and 2015, the System's brokers/dealers held \$0 and \$294, respectively, in cash exposed to custodial credit risk.

***K. Joint Powers Authority***

**DRSD/EBMUD Regional Water Authority** - On June 28, 1995, the Dublin San Ramon Service District (DSRSD) and East Bay Municipal Utility District (District) entered into a Joint Powers Agreement (JPA) and established the DSRSD/EBMUD Recycled Water Authority (DERWA) with the purpose of creating a recycled water program in the San Ramon and Livermore-Amador Valleys. The JPA governing body is not substantially the same as the District and its independent Board consists of two directors each from the DSRSD and District. The JPA books and records are being maintained separately from DSRSD and the District. The DSRSD and District made member contributions to fund the JPA start-up and continue to fund capital projects at the request of the JPA on an as needed basis. Although DERWA has a significant relationship with the District, DERWA does not provide services solely to the District, and therefore is not considered a component unit of the District.

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**NOTE 2 - CASH AND INVESTMENTS (Continued)**

**Freeport Regional Water Authority** - The Freeport Regional Water Project (FRWP) is a regional water supply project undertaken by the District in partnership with the Sacramento County Water Agency (SCWA). In February 2002, with the support of the United States Bureau of Reclamation, the District and SCWA formed the Freeport Regional Water Authority (FRWA) under a joint powers agreement to develop the FRWP. The FRWP provides the permanent infrastructure to allow the District to receive water deliveries pursuant to the Long-Term Renewal Central Valley Project Contract at a new point of diversion along the Sacramento River. In addition to providing the District up to 100 MGD of supplemental water in dry years, the FRWP can provide up to 85 MGD to SCWA in all years. The District's share of the facilities is recorded as Investment in JPA and is presented on the balance sheet. To increase the District's reserve of water supply due to the recent drought, the District activated the pumping of water from the Sacramento River via the Freeport facility during Fiscal Year 2015.

**NOTE 3 – CAPITAL ASSETS**

**A. Summary**

The District capitalizes all assets with a historical cost of at least \$5 and a useful life of at least three years. Contributed capital assets are valued at their estimated acquisition value on the date contributed.

The purpose of depreciation is to spread the cost of capital assets equitably among all customers over the life of these assets, so that each customer's bill includes a pro rata share of the cost of these assets. The amount charged to depreciation expense each year represents that year's pro rata share of depreciable capital assets.

Depreciation of all capital assets in service, excluding land, is charged as an expense against operations each year and the total amount of depreciation taken over the years, called accumulated depreciation, is reported on the balance sheet as a reduction in the book value of the capital assets.

Capital assets are depreciated using the straight line method of depreciation, which means the cost of the asset is divided by its expected useful life in years and the result is charged to expense each year until the asset is fully depreciated. The District has assigned the useful lives listed below to capital assets:

Utility plant:	<u>Years</u>
Source of supply	25-100
Raw water transmission and storage	20-100
Interception and outfall	60-75
Pumping	25-75
Treatment	20-75
Distribution	25-75
Power Generation	25-75
Equipment	5-20
Plant Structures	25-75
Other	5-40

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
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**NOTE 3 – CAPITAL ASSETS (Continued)**

**B. Additions and Retirements**

Capital assets activity for all business-type activities for the year ended June 30, 2016, was as follows:

	Balance at June 30, 2015	Additions and Transfers, net	Retirements and Transfers, net	Balance at June 30, 2016
<b>Water System:</b>				
Capital assets, not being depreciated:				
Land	\$55,445	\$275	(\$16)	\$55,704
Rights-of-way	3,000	29		3,029
Construction in progress - Land	446	700	(333)	813
Construction in progress	308,999	228,324	(235,163)	302,160
Total capital assets, not being depreciated	367,890	229,328	(235,512)	361,706
Capital assets, being depreciated:				
Buildings and improvements	222,168	17,922	(4)	240,086
System and improvements	4,610,673	203,556	(21,419)	4,792,810
Machinery and equipment	86,563	13,684	(2,031)	98,216
Total capital assets, being depreciated:	4,919,404	235,162	(23,454)	5,131,112
Less accumulated depreciation for:				
Buildings and improvements	(96,127)	(5,050)	4	(101,173)
System and improvements	(1,442,488)	(89,689)	2,793	(1,529,384)
Machinery and equipment	(64,230)	(3,746)	1,875	(66,101)
Total accumulated depreciation	(1,602,845)	(98,485)	4,672	(1,696,658)
Total capital assets, being depreciated, net	3,316,559	136,677	(18,782)	3,434,454
Water System capital assets, net	\$3,684,449	\$366,005	(\$254,294)	\$3,796,160
<b>Wastewater System:</b>				
Capital assets, not being depreciated:				
Land	\$20,826	\$174		\$21,000
Rights-of-way	191			191
Construction in progress - Land	244	189	(\$174)	259
Construction in progress	64,775	36,664	(38,293)	63,146
Total capital assets, not being depreciated	86,036	37,027	(38,467)	84,596
Capital assets, being depreciated:				
Buildings and improvements	76,304	177		76,481
System and improvements	904,046	36,829	(2,367)	938,508
Machinery and equipment	11,313	1,287		12,600
Total capital assets, being depreciated	991,663	38,293	(2,367)	1,027,589
Less accumulated depreciation for:				
Buildings and improvements	(35,198)	(1,572)		(36,770)
System and improvements	(353,922)	(20,220)		(374,142)
Machinery and equipment	(6,994)	(737)		(7,731)
Total accumulated depreciation	(396,114)	(22,529)		(418,643)
Total capital assets, being depreciated, net	595,549	15,764	(2,367)	608,946
Wastewater System capital assets, net	\$681,585	\$52,791	(\$40,834)	\$693,542
Business-type activities capital assets, net	\$4,366,034	\$418,796	(\$295,128)	\$4,489,702

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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**NOTE 3 – CAPITAL ASSETS (Continued)**

***C. Construction in Progress***

Construction in Progress in fiscal 2015-2016 comprises:

	<u>Expended to Date</u>
<b><i>Water System:</i></b>	
Pipeline Infrastruct Renewals	\$ 42,445
Pumping Plant Rehabilitation	39,044
Treatment Plant Upgrades	25,540
Reservoir Rehab/Maintenance	20,753
Summit Pressure Zone Improve	17,502
Addl Supplemental Supply Projs	16,989
SRV Recycled Water Program	13,312
Dam Seismic Upgrades	9,605
Water Conservation Project	7,102
WTTIP WTP Improvements	6,460
Pipeline Relocations	6,249
Pardee/Cam Rec Areas Impr Plan	5,947
Raw Water Studies and Improves	5,930
Large Diameter Pipelines	5,749
West of Hills Transmission	4,569
Srvc Latl Repl Polybutylene	4,355
Open Cut Reservoir Rehab	4,148
East Bayshore	3,957
Distribution System Upgrades	3,679
Reservoir Tower Modifications	3,581
Other Construction Projects	56,057
	<u>\$ 302,973</u>
<b><i>Wastewater System:</i></b>	
Wood St Sewer Intercept Rehab	\$ 20,382
Treatment Plant Infrastructure	7,904
Resource Recovery Project	6,582
PGS Expansion	5,821
Infiltration/Inflow Contrl Prj	4,695
Digester Upgrade	3,553
DCS Upgrade	3,162
Routine Cap Equip Replacement	1,739
MWWTP Master Plan	1,601
Odor Control Improvements	1,184
PS Q FM Dual-Mode Operation	1,109
Plant Pipe Replacement	858
3rd St Sewer Interceptor Rehab	712
MWWTP Pwr Dist Sys Upgrade	652
Outfall Investigation Project	547
Other Construction Projects	2,904
	<u>\$ 63,405</u>
Total District Construction in Progress	<u><u>\$ 366,378</u></u>

At June 30, 2016, the District's remaining current major project commitments are estimated to be \$53,601 for the Water System and \$2,036 for the Wastewater System.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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**NOTE 4 – ACCOUNTS PAYABLE & ACCRUED EXPENSES**

Accounts payable and accrued expenses at June 30, 2016 and 2015 consist of:

	Water System		Wastewater System		Total	
	June 30	June 30	June 30	June 30	June 30	June 30,
	2016	2015	2016	2015	2016	2015
Accounts payable	\$26,241	\$22,743	\$4,792	\$3,845	\$31,033	\$26,588
Accrued salaries	5,185	3,982	825	683	6,010	4,665
Accrued compensated absences	27,598	26,424	4,291	4,178	31,889	30,602
Other	18,351	16,069	414	413	18,765	16,482
Total	<u>\$77,375</u>	<u>\$69,218</u>	<u>\$10,322</u>	<u>\$9,119</u>	<u>\$87,697</u>	<u>\$78,337</u>

**NOTE 5 – EXTENDABLE COMMERCIAL PAPER NOTES**

The District's Board of Directors has authorized the issuance of short-term indebtedness of the District in a maximum principal amount of up to the lesser of either the average of the total annual revenue for the three preceding years or 25% of the District's total outstanding bonds. Under this authority the District has established two commercial paper programs: an extendable commercial paper program and a traditional commercial paper program. In December 2015, the District had determined an aggregate of \$522 million to be authorized for these programs. The proceeds from the issuance of commercial paper under these programs are restricted as to use. Under the programs, which must be authorized by the Board of Directors every seven years by resolution subject to the right of referendum, the Water System or the Wastewater System may issue commercial paper and bank notes at prevailing interest rates for periods of not more than 270 days from the date of issuance. The programs were last authorized on April 28, 2015.

The District initially established its extendable commercial paper program in March 2009. Under the extendable commercial paper program, no liquidity support agreement with a commercial bank is needed. Instead, the District limits the term of the extendable commercial paper to 120 days, and the investor agrees to extend the maturity of their investment by 150 days at a higher interest rate in the event of a failed remarketing, giving the District sufficient time to find a replacement investor or refund the extendable commercial paper with a different form of debt to repay the investor.

As of June 30, 2016, \$0 million in Water Series and \$15.0 million in Wastewater Series extendable commercial paper notes were outstanding under this program. The Water Series included terms of 68 to 120 days and interest rates ranging from 0.07% to 0.16% as of June 30, 2015. The Wastewater Series included the term of 91 days and an interest rate of 0.52% as of June 30, 2016, and the term of 91 days and an interest rate of 0.07% as of June 30, 2015.

The District established its current traditional commercial paper program in December 2015. As of June 30, 2016, \$359.8 million in Water Series and \$0 in Wastewater Series commercial paper notes were outstanding under this program. The Water Series commercial paper notes included terms of 35 to 98 days and interest rates ranging from 0.41% to 0.49% as of June 30, 2016.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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**NOTE 5 – COMMERCIAL PAPER NOTES (Continued)**

To provide liquidity for the Water Series notes issued under the traditional commercial paper program, the District maintains two liquidity support facilities with commercial banks: a standby letter of credit in the amount of \$200,000,000 and a revolving credit agreement in the amount of \$160,000,000. Borrowings by the Water System for commercial paper notes and bank notes under the traditional commercial paper program cannot exceed the aggregate amount available under these agreements. Drawings under the liquidity support facilities are restricted to pay principal on maturing Water Series commercial paper notes. There were no borrowings under the liquidity support facilities as of June 30, 2016. The liquidity support facilities expire on December 1, 2020 and November 30, 2018, respectively, and are subject to extension at the request of the District upon agreement by the issuing bank.

There were no unused proceeds of commercial paper notes as of June 30, 2016. It is the District's practice to use the commercial paper programs as a portion of the District's long-term variable rate debt exposure.

**NOTE 6 – LONG-TERM DEBT**

***A. Composition and Changes***

The District generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. The District's debt issues and transactions are summarized below and discussed in detail thereafter.

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**NOTES TO BASIC FINANCIAL STATEMENTS**  
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**NOTE 6 - LONG TERM DEBT (Continued)**

	Original Issue Amount	Balance June 30, 2015	Additions	Retirements	Balance June 30, 2016	Amount due within one year
<b><i>Water System Revenue Bonds:</i></b>						
<b>Subordinated Series 2007 B</b>						
3.75 - 5.00%, due 6/1/19	\$54,790	\$24,940		\$5,785	\$19,155	\$6,075
<b>Subordinated Series 2008 A</b>						
.39% variable rate, due 6/1/38	322,525	105,250			105,250	
<b>Subordinated Series 2010 A</b>						
3.00 - 5.00%, due 6/1/36	192,830	185,700		2,300	183,400	2,455
<b>Subordinated Series 2010 B</b>						
5.87%, due 6/1/40	400,000	400,000			400,000	
<b>Series 2012 A</b>						
5.00% , due 6/1/37	191,750	191,750			191,750	
<b>Series 2012 B</b>						
1.00 -5.00%, due 6/1/26	358,620	312,250		33,440	278,810	29,360
<b>Series 2013 A</b>						
5.00%, due 6/1/21	48,670	40,015		5,815	34,200	6,135
<b>Series 2014 A</b>						
3.00-5.00%, due 6/1/35	128,315	128,315			128,315	
<b>Series 2014 B</b>						
2.00-5.00%, due 6/1/30	242,730	242,100		880	241,220	7,770
<b>Series 2014 C</b>						
5.00%, due 6/1/44	75,000	75,000			75,000	
<b>Series 2015 A</b>						
4.00-5.00%, due 6/1/37	429,360	429,360			429,360	
<b>Series 2015 B</b>						
4.00-5.00%, due 6/1/45	74,335	74,335			74,335	
<b>Series 2015C</b>						
4.00-5.00%, due 6/1/45	110,715	110,715			110,715	
Total water long-term bonds		2,319,730		48,220	2,271,510	51,795

(Continued)

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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**NOTE 6 - LONG TERM DEBT (Continued)**

	Original Issue Amount	Balance June 30, 2015	Additions	Retirements	Balance June 30, 2016	Amount due within one year
<b><i>Wastewater System General</i></b>						
<b><i>Obligation Bonds:</i></b>						
<b>Series G</b>						
5.00%, due 4/1/18	\$14,160	\$10,910		\$3,565	\$7,345	\$3,830
<b><i>Wastewater System Revenue Bonds:</i></b>						
<b>Subordinated Series 2007 B</b>						
3.75 - 5.00%, due 6/1/26	46,670	29,815		2,895	26,920	3,005
<b>Subordinated Series 2010 A</b>						
2.00 - 5.00%, due 6/1/29	58,095	46,560		2,265	44,295	2,390
<b>Subordinated Series 2010 B</b>						
5.03 - 5.18%, due 6/1/40	150,000	150,000			150,000	
<b>Series 2012 A</b>						
5.00%, due 6/1/37	20,000	20,000			20,000	
<b>Series 2014 A</b>						
2.00 - 5.00%, due 6/1/31	82,150	80,425		4,115	76,310	4,270
<b>Series 2015 A-1</b>						
5.00%, due 6/1/37	54,805	54,805			54,805	
<b>Series 2015 A-2</b>						
5.00%, due 6/1/38	13,565	13,565			13,565	
<b>Series 2015 B</b>						
2.10 - 3.35%, due 6/1/30	2,795	2,795		160	2,635	160
Total wastewater long-term bonds		408,875		13,000	395,875	13,655
<b>Total long-term bonds</b>		2,728,605		61,220	2,667,385	65,450
<b><i>Water Loans:</i></b>						
<b><i>State Water Resources Control Board</i></b>						
<b>2004 Upper San Leandro Reservoir</b>						
<b>Project</b>						
2.51%, due 1/1/24	\$2,188	\$1,064		\$114	\$950	\$117
<b>2008 East Bayshore, Recycled Water</b>						
<b>Project</b>						
2.40%, due 4/1/28	20,100	13,932		926	13,006	948
Total water loans		14,996		1,040	13,956	1,065
<b>Total long-term loans</b>		14,996		1,040	13,956	1,065
<b><i>Commercial Paper (see Note 5)</i></b>						
Water System Commercial Paper		359,800	\$2,325,900	2,325,900	359,800	
Wastewater System Commercial Paper		15,000	105,000	105,000	15,000	
Total commercial paper		374,800	2,430,900	2,430,900	374,800	
Amount due within one year		(62,260)	(4,255)		(66,515)	
Add: Unamortized premium, net		200,318		16,307	184,011	
<b>Total long-term liabilities, net</b>		\$3,256,459	\$2,426,645	\$2,509,467	\$3,173,637	\$66,515

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
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**NOTE 6 - LONG TERM DEBT (Continued)**

***B. Description of the District's Long-Term Debt Issues***

General obligation and revenue bonds are generally callable at future dates. The general obligation bonds are repaid from property taxes levied on property within the District.

Revenue-supported debt can be authorized by the District's Board of Directors, subject to a referendum process.

The net revenues of the Water System are pledged toward the repayment of the Water Revenue Bonds and the State Water Resources Control Board Parity Loans of the Water System. The net revenues of the Wastewater System are pledged toward the repayment of the Wastewater Revenue Bonds of the Wastewater System.

The District is subject to certain revenue bond covenants on outstanding debt which require the setting of rates and charges to yield net revenues of the respective Water System or Wastewater System, as applicable, equal to at least 110% of the current annual debt service requirements for all revenue bonds and other parity obligations of the respective Water System or Wastewater System. The District has designated \$119.1 million (\$95.0 million for the Water System and \$24.1 million for the Wastewater System) of operating reserves as a rate stabilization fund, which is available to satisfy the coverage requirements for debt service in future years. There have never been any draws for this purpose.

***C. Debt Service Requirements***

Annual debt service requirements, including the swap payments discussed in F., are shown below for the above debt issues:

For the Year Ending June 30	Water System		Wastewater System		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2017	\$52,860	\$112,143	\$13,655	\$19,009	\$66,515	\$131,152
2018	59,116	109,629	13,790	18,015	72,906	127,644
2019	61,562	106,994	10,675	17,877	72,237	124,871
2020	64,309	104,051	11,185	17,075	75,494	121,126
2021	67,141	100,963	11,668	17,194	78,809	118,157
2022 - 2026	381,377	453,920	66,975	76,260	448,352	530,180
2027 - 2031	434,203	355,456	75,670	60,319	509,873	415,775
2032 - 2036	561,305	238,247	92,690	39,670	653,995	277,917
2037 - 2041	497,364	85,524	99,570	12,953	596,934	98,477
2042 - 2045	106,229	10,410			106,229	10,410
Totals	\$2,285,466	\$1,677,337	\$395,878	\$278,372	\$2,681,344	\$1,955,709

Interest payments on debt subject to swap agreements were calculated using the variable rates at June 30, 2016.

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**NOTE 6 - LONG TERM DEBT (Continued)**

***D. Variable Rate Debt***

The District has a number of bond issues with variable interest rates. The Water Series 2008A Bonds are subject to purchase on the demand of the holder with seven days prior notice at a price equal to the principal plus accrued interest. The remarketing agent is authorized to use its best efforts to sell the repurchased bonds at a price equal to 100 percent of the principal amount by adjusting the interest rate. In the event that they are not sold, under Standby Bond Purchase Agreements (SBPAs) issued by banks for the above variable rate debt issues, the trustee or the remarketing agent is entitled to draw an amount sufficient to pay the purchase price of delivered bonds. The District is required to pay an annual commitment fee to the banks issuing SBPAs. Expiration dates of these SBPAs are presented below by debt issue. In addition, the remarketing agent receives an annual fee of seven basis points of the outstanding principal amount of the bonds.

Issue	Standby Purchase Agreement Terms		
	Expiration Date	Interest Rate	Rate Swap Swap Rate
Water System Revenue			
Subordinated Bonds:			
Series 2008A-1	12/9/2016	Reset Weekly	See below
Series 2008A-2	7/2/2018	Reset Weekly	See below
Series 2008A-3	7/2/2018	Reset Weekly	See below
Series 2008A-4	12/9/2016	Reset Weekly	See below

***E. Interest Rate Swap Agreements***

The District has entered into a number of matched interest rate swap contracts with providers in which the District contracted to pay a fixed rate on the nominal amount of outstanding bonds, in exchange for a floating rate payment, set monthly on the first day of each calendar month for its LIBOR based swaps. The combination of variable rate bonds and a floating-rate swap creates synthetic fixed-rate debt for the District. The synthetic fixed rate on the bonds protects the District against increases in short-term interest rates. The terms, fair value, and credit risk of each of the swap agreements are discussed below.

*Term and credit risks.* The terms and credit ratings of the outstanding swaps, as of June 30, 2016, are included below. The District's swap agreements contain scheduled reductions to outstanding notional amounts that are expected to follow scheduled reductions in the associated bonds.

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**NOTE 6 – LONG-TERM DEBT (Continued)**

Related Bond Issue	Notional Amount	Effective Date	Counterparty	Counterparty Credit Ratings (Moody's/ S&P)	Issuer Pays	Issuer Receives	Maturity/ Termination Date
2008A Water System Refunding Bonds	37,240	6/2/2005	JP Morgan Chase & Co.	Aa3/A+	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	37,240	6/1/2011	Bank of America National Assoc.	A1/A	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	16,195	6/1/2012	Merrill Lynch Capital Services	Baa1/BBB+	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	14,575	9/25/2008	The Bank of New York Mellon	Aa2/AA-	3.115%	62.3% of 30-day LIBOR	6/1/2038

The effect of these transactions is structured to result in the approximate equivalent of the District paying a fixed rate on the bonds, since the inflow of payments from the LIBOR based swaps are anticipated to approximate the outflow of payments on the variable rate bonds. Only the net difference in interest payments to the swap providers is made under the swap contracts.

*Fair value.* The fair value of the swaps takes into consideration the prevailing interest rate environment, the specific terms and conditions of a given transaction and any upfront payments that may have been received. The fair value was estimated using the zero-coupon discounting method. This method calculates the future payments required by the swap, assuming that the current forward rates implied by the LIBOR swap yield curve are the market's best estimate of future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for a hypothetical zero-coupon rate bond due on the date of each future net settlement on the swaps. The fair values of each swap at June 30, 2016, are included below:

Related Bond Issuance	Fair Value	
	2016	2015
2008A Water System Refunding Bonds	(\$36,720)	(23,485)

*Credit risk.* As of June 30, 2016, the District was not exposed to credit risk on its outstanding swaps because the swaps had a negative fair value of \$36.7 million. The District faces a maximum possible loss equivalent to the swaps' fair value. However, if interest rates increase and the fair value of the swaps were to become positive, the District would be exposed to credit risk.

The District will be exposed to interest rate risk only if the counterparty to the swap defaults or if the swap is terminated. The swap agreements contain provisions that determine if and when the District or the counterparty must provide collateral. The agreements require full collateralization of the fair value of the swap should the counterparty's credit rating fall below a certain threshold. As of June 30, 2016, the District was not required to provide collateral to any SWAP counterparty.

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**NOTE 6 – LONG-TERM DEBT (Continued)**

*Basis risk.* Basis risk is the risk that the interest rate paid by the District on underlying variable rate bonds to bondholders temporarily differs from the variable swap rate received from the applicable counterparty. The District is exposed to basis risk as the District receives payments based on LIBOR rates to offset the actual variable interest rate the District pays on its bonds. The District is exposed to basis risk should the floating rate that it receives on a swap be less than the actual variable rate the District pays on the bonds. Depending on the magnitude and duration of any basis risk shortfall, the expected cost of the basis risk may vary. As of June 30, 2016, the District has a basis difference on its swaps of a negative 10 basis points (the District receives less from its swap floating rate payment than it pays out on its variable rate debt).

*Termination risk.* The District or the counterparty may terminate if the other party fails to perform under the terms of the SWAP contract. The District will be exposed to variable rates if the providers to the swap contracts default or if the swap contracts are terminated as it will lose the hedge provided by the SWAP. A termination of the swap contracts may also result in the District's making or receiving a termination payment based on market interest rates at the time of the termination. If at the time of termination the swap has a negative fair value, the District would be liable to the counterparty for a payment equal to the swap's fair value.

*Swap payments and associated debt.* Using rates as of June 30, 2016, debt service requirements of the District's outstanding variable-rate debt and net swap payments are as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary. These payments below are included in the Debt Service Requirements at C. above:

For the Year Ending June 30	Variable-Rate Bonds		Interest Rate Swaps, Net	Total
	Principal	Interest	Interest	
2017	-	\$415	\$2,970	\$3,385
2018	-	415	2,970	3,385
2019	-	415	2,970	3,385
2020	-	415	2,970	3,385
2021	-	415	2,970	3,385
2022 - 2026	-	2,075	14,850	16,925
2027 - 2031	\$11,675	2,029	14,521	16,550
2032 - 2036	64,575	1,097	7,858	8,955
2037 - 2038	29,000	58	416	474
Totals	<u>\$105,250</u>	<u>\$7,334</u>	<u>\$52,495</u>	<u>\$59,829</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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**NOTE 7 – NET POSITION**

Net Position is the excess of all the District's assets and deferred outflows over all its liabilities and deferred inflows, regardless of fund. Net Position is divided into three captions. These captions apply only to Net Position and are described below:

*Net Investment in Capital Assets* describes the portion of Net Position which is represented by the current net book value of the District's capital assets, less the outstanding balance of any debt issued to finance these assets and any related deferred outflows and inflows.

*Restricted* describes the portion of Net Position which is restricted as to use by the terms and conditions of agreements with outside parties, governmental regulations, laws, or other restrictions which the District cannot unilaterally alter. These principally include developer fees received for use on capital projects, debt service requirements, and fees charged for the provision of future water resources.

*Unrestricted* describes the portion of Net Position which is not restricted to use.

**NOTE 8 – EMPLOYEES' RETIREMENT PLAN**

**A. Description**

The Employees' Retirement System is a single-employer, contributory, defined benefit pension plan (the Plan) which provides retirement, disability, survivorship, and post-employment healthcare benefits for eligible directors, officers, and employees of the District. The Plan is administered by a Retirement Board composed of three members appointed by the District's Board of Directors and two members elected by and from the active membership of the Plan, and a nonvoting member elected by the retirees of the Plan. Retirement Ordinance No. 40 assigns the authority to establish Plan benefit provisions to the District's Board of Directors. A stand-alone financial report of the Employees' Retirement System is available. Please send request to the Controller, Accounting Division, P.O. Box 24055, Oakland, CA 94623-1055 or visit the District website at <http://www.ebmud.com>.

All regular full-time employees of the District are members of the Plan. In accordance with the ordinance governing the Plan, eligible employees become members on the first day they are physically on the job. District-defined benefits vest in part with members after completion of five years of continuous, full-time employment.

The Plan is funded by contributions from its members and from the District. District contribution percentages are recommended by the Retirement Board; employee contribution rates are established by the Board of Directors pursuant to the Ordinance, giving consideration to actuarial recommendations and prospective changes in factors which affect funding.

**B. Retirement Benefits and Allowances**

There are two tiers in effect currently, the 1980 Plan and the 2013 Plan. Employees who became Members of the retirement system prior to January 1, 2013, or who have reciprocal Membership are in the 1980 Plan, Employees who became Members on or after January 1, 2013 are in the 2013 Plan.

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<b>NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)</b>
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1980 Plan Members may elect voluntary reduced service retirement upon attaining the age of 54 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 62 and completing 5 years of continuous full-time employment or age 65 without restriction. Members who continue to work upon attaining the normal retirement age of 65 continue to contribute to the Plan, and at the time they retire, computation of their retirement allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on date of employment, length of employment, age at date of retirement, and compensation earned during employment.

2013 Plan Members may elect voluntary reduced service upon attaining the age of 52 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 67, and completing 5 years of continuous full-time employment. Members who continue to work upon attaining the normal retirement age of 67 continue to contribute to the Plan, and at the time they retire, computation of their allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on length of service, age at retirement, and compensation earned during employment.

***C. Post-employment Healthcare Cost***

In addition to retirement benefits, the District provides post-employment health benefits assistance (administered by the Employees’ Retirement System) for employees who retire from the District or their surviving spouses. As of June 30, 2016, there were 1,482 participants receiving these health care benefits.

Effective July 1, 1996, a 20-year vesting schedule for full benefits was implemented for all new participants. Effective January 1, 1999, retired members who had separated from the District prior to their retirement and who had at least 10 years of service also became eligible for the post-employment health benefits based on the same sliding scale. The scale provides for 25% of healthcare benefits for service from 5 through 10 years, 50% of healthcare benefits for service from 10 through 15 years, 75% of healthcare benefits for service from 15 through 20 years, and 100% of healthcare benefits for service of 20 years or more. Effective July 1, 2003, the District reimbursed up to \$450 per month (\$550 per month effective July 1, 2004, for membership of a spouse or registered domestic partner) for any health, dental, or long-term care insurance premiums paid by the retiree for themselves, current spouse, or domestic partner, or any health, dental, or long-term care insurance premiums paid by the eligible surviving spouse of a retiree. These benefits are paid from a separate post-employment healthcare benefits fund which up until June 17, 2002, was advance funded entirely by the District on an actuarially determined basis. Cash reimbursement of these benefits totaled \$7,685 in the year ended June 30, 2016. Effective June 18, 2002, a portion of the post-employment healthcare benefit costs is recovered through employee contributions.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)</b>
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Through June 30, 1999, the medical premium subsidy was not a vested benefit and the District reserved the right to modify or terminate the benefit at any time. If the medical subsidy were terminated, assets accumulated from contributions made for the subsidy would be used to provide other pension benefits. Effective July 1, 1999, the medical premium subsidy became a vested benefit to a maximum of \$200 per month, was changed effective October 1, 2000, to a maximum of \$250 per month, and was changed effective July 1, 2002, to a maximum of \$400 per month, and was changed effective July 1, 2003, to a maximum of \$450 per month, and was changed again effective July 1, 2004, to a maximum of \$450 per month for a single retiree or survivor and \$550 per month for retiree and a spouse or a registered domestic partner.

***D. Actuarial Assumptions and Funding Policy***

The Plan’s funding policy provides for periodic District contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due as specified by ordinance. The individual entry age normal method is used to determine the normal cost for other post-employment benefits (OPEB) and service cost for pension, and the OPEB unfunded actuarial accrued liability (past service liability) is amortized as a level percentage of future payroll over 30 years open period.

District contributions for the year ended June 30, 2016 are as follows:

1980 Plan:

Pension plan:

Employer service cost	14.86%
Toward unfunded pension liability	22.85%

Other post-employment benefits:

Employer normal cost	1.22%
Unfunded actuarial accrued liability	4.29%

2013 Plan:

Pension plan:

Employer service cost	8.07%
Toward unfunded pension liability	22.85%

Other post-employment benefits:

Employer normal cost	0.77%
Unfunded actuarial accrued liability	4.29%

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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<b>NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)</b>
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Effective June 30, 2016, contributions for fiscal year 2016/2017 are as follows:

1980 Plan:

Pension plan:

Employer service cost	14.50%
Toward unfunded pension liability	21.41%

Other post-employment benefits:

Employer normal cost	1.16%
Unfunded actuarial accrued liability	4.21%

2013 Plan:

Pension plan:

Employer service cost	8.01%
Toward unfunded pension liability	21.41%

Other post-employment benefits:

Employer normal cost	0.74%
Unfunded actuarial accrued liability	4.21%

Actuarial calculations reflect a long-term perspective and actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing the costs between the employer and plan members to that point.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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<b>NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)</b>
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Significant assumptions used to compute contribution requirements from the latest unaudited actuarial are as follows:

Valuation date	June 30, 2015
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; experience gains/losses are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment rate of return	7.75%
Average projected salary increases*	Ranges from 4.25% to 9.75% based on years of service*
Inflation rate	3.25%
Cost-of-living adjustments	3.15%
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with scale AA to 2016, set back one year for males and set back two years for females
Annual healthcare costs trend rates	6.625% reduced by increments to a rate of 5% after 10 years

*\* Includes inflation of 3.00% plus across the board salary increases of 0.50% plus merit and promoti*

All assumptions are the same for the post-employment health care benefits except for the discount rate, assumed at a rate of 7.5% for the funded and unfunded portions.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

***E. Contributions Required and Contributions Made***

Contributions for the years ended June 30, 2016 and 2015 based on the actuarial valuation, were as follows:

	2016		2015	
	Pension	Healthcare Benefit Plan	Totals	
Regular contributions:				
District contributions	\$65,218	\$9,454	\$74,672	\$73,141
Member contributions	14,710	162	14,872	\$13,407
	<u>79,928</u>	<u>9,616</u>	<u>89,544</u>	<u>86,548</u>
Other contributions:				
Member buybacks	31	22	53	20
	<u>\$79,959</u>	<u>\$9,638</u>	<u>\$89,597</u>	<u>\$86,568</u>

Regular District and member contributions in fiscal 2016 represent an aggregate of 42.44% and 8.48% of covered payroll, respectively. The District’s contributions include amounts for post-employment healthcare benefits at a rate of 5.32% of covered payroll, determined by the actuarial dated June 30, 2015. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2016, was \$175,928 which was 90.48% of the total District payroll of \$194,432.

The total District contribution of \$75,089 as of June 30, 2016, consisted of \$74,672 regular contribution (\$26,867 for normal cost and service cost also includes \$47,805 for amortization of the unfunded actuarial accrued liability and payment to reduce the net pension liability) and \$417 interest on contribution.

Regular District and member contributions in fiscal 2015 represent an aggregate of 43.67% and 7.98% of covered payroll, respectively. The District’s contributions include amounts for post-employment healthcare benefits at a rate of 5.43% of covered payroll, determined by the actuarial dated June 30, 2014. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2015, was \$167,380, which was 91.13% of the total District payroll of \$183,678.

The total District contribution of \$73,453 as of June 30, 2015, consisted of \$73,141 regular contribution (\$26,528 for normal cost and \$46,613 for amortization of the unfunded actuarial accrued liability) and \$312 interest on contributions.

Member buyback contributions relate to prior years’ service credits for Plan participants. The Plan was amended in 1998 for limited temporary construction workers and in 2003 for intermittent employees to allow current members, who previously worked for the District in a status which did not qualify for membership in the System, to establish retirement service credit for prior service with payments over a period of two to eight years.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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<b>NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)</b>
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***F. Schedule of Employer Contributions***

The District’s annual OPEB costs and schedules of contributions for the past three years are as follows:

	<u>Actual Contribution</u>	<u>Annual OPEB Cost</u>	<u>Percentage Contributed</u>	<u>Net OPEB Obligation</u>
Fiscal year ended June 30:				
2014	\$8,831	\$11,184	79%	\$21,685
2015	9,275	11,241	83%	23,651
2016	9,871	11,542	86%	25,322

The annual required contributions for fiscal years ended June 30, 2016, 2015 and 2014, include amounts for the pay-as-you-go amounts for post-employment healthcare benefits.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

***Health Insurance Benefit Plan:***

During the fiscal year ended June 30, 2016, the District made contributions to the Health Insurance Benefit Plan toward the Annual Required Contribution (ARC) amounting to \$9,454 which represented 4.86% of the \$194,432 total District payroll. During the fiscal year ended June 30, 2015, the District made contributions toward the ARC amounting to \$8,963 to the plan which represented 4.88% of the \$183,678 total District payroll. As a result, the District has recorded the Net OPEB Obligation (NOO), representing the difference between the ARC and actual contributions, as presented below:

Net OPEB obligation at June 30, 2014		\$21,685
Annual required contribution (ARC)	\$11,254	
Interest on net OPEB obligation	1,533	
Adjustments to the ARC	<u>(1,546)</u>	
Annual OPEB cost - fiscal 2014/2015	11,241	
Less contributions made during fiscal year:		
Contributions to Northern Trust	(8,963)	
Interest on Contributions to Northern Trust	<u>(312)</u>	
Contributions	(9,275)	
Contributions less than ARC		<u>1,966</u>
Net OPEB obligation at June 30, 2015		23,651
Annual required contribution (ARC)	11,590	
Interest on net OPEB obligation	1,671	
Adjustments to the ARC	<u>(1,719)</u>	
Annual OPEB cost - fiscal 2015/2016	11,542	
Less contributions made during fiscal year:		
Contributions to Northern Trust	(9,454)	
Interest on Contributions to Northern Trust	<u>(417)</u>	
Contributions	(9,871)	
Increase in net OPEB obligations		<u>1,671</u>
<b>Net OPEB obligation at June 30, 2016</b>		<b><u><u>\$25,322</u></u></b>

A schedule of funding progress for the retirement and post-employment healthcare plans presenting multiple-year trend information as to whether the actuarial value of plan assets is increasing or decreasing relative to the actuarial accrued liability for benefits over time is presented immediately following the notes to basic financial statements in the Required Supplementary information section.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

**G. Net Pension Liability**

The net pension liability (i.e., the Plan’s liability determined in accordance with GASB No. 68 less the fiduciary net position) as of June 30, 2016 and 2015 is as shown below:

	2016	2015
Total pension liability	\$1,845,912	\$1,756,706
Plan fiduciary net position	<u>(1,383,053)</u>	<u>(1,325,387)</u>
Employer net pension liability	<u>\$462,859</u>	<u>\$431,319</u>
Plan fiduciary net position as a percentage of total pension liability	74.93%	75.45%
Covered payroll	\$179,991	\$173,111
Liability as a percentage of covered employee payroll	257.16%	249.16%

Actuarial valuation of the ongoing System involve estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Employers’ net pension liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The net pension liabilities was measured as of June 30, 2015 and 2014 and are not adjusted or rolled forward to the June 30, 2016 and 2015 reporting dates, respectively.

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

For the year ended June 30, 2016, the District recognized pension expense as follows:

	<u>Water</u>	<u>Wastewater</u>	<u>Total</u>
Contributions made after measurement date	(\$55,579)	(\$9,639)	(\$65,218)
Current year changes in the net pension liability:			
Service cost	31,262	5,529	36,791
Interest on total pension liability	111,820	19,775	131,595
Member contributions	(11,267)	(1,993)	(13,260)
Projected earning on investments	(84,415)	(14,928)	(99,343)
Difference in expected and actual earnings	6,807	1,204	8,011
Other	(17,331)	(4,021)	(21,352)
Total current year activity	<u>36,876</u>	<u>5,566</u>	<u>42,442</u>
Total pension expense	<u>(18,703)</u>	<u>(\$4,073)</u>	<u>(\$22,776)</u>

At June 30, 2016, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>		<u>Deferred Inflows of Resources</u>	
	<u>Water</u>	<u>Wastewater</u>	<u>Water</u>	<u>Wastewater</u>
Pension contributions subsequent to measurement date	\$55,579	\$9,639		
Differences between expected and actual experience	222	39	\$950	\$168
Changes of assumptions	9,354	1,654		
Change in proportion and differences between employer contributions and proportionate share of contributions	2,826			2,826
Net difference between projected and actual earnings on pension plan investments	27,229	4,816	66,643	11,786
Total	<u>\$95,210</u>	<u>\$16,148</u>	<u>\$67,593</u>	<u>\$14,780</u>

A total of \$65,218 was reported as deferred outflows of resources related to contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the year ended June 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ended	<u>Deferred Outflows of Resources</u>		<u>Deferred Inflows of Resources</u>	
June 30	<u>Water</u>	<u>Wastewater</u>	<u>Water</u>	<u>Wastewater</u>
2017	\$7,771	\$1,276	\$19,373	\$4,284
2018	7,771	1,276	19,373	4,284
2019	7,771	1,276	19,483	4,287
2020	7,771	1,276	829	479

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO BASIC FINANCIAL STATEMENTS**  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan 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 weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and projected arithmetic real rates of return, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class are summarized below:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Large Cap Equity	36%	5.91%
Domestic Small Cap Equity	4%	6.47%
Developed International Equity	12%	6.88%
Emerging Markets Equity	3%	8.24%
Domestic Bonds	10%	0.85%
Non-Core Fixed Income	10%	3.10%
Real Estate	5%	4.79%
Covered Calls	20%	4.90%
Total	<u>100%</u>	

The discount rates used to measure the total pension liability were 7.50% and 7.50% as of June 30, 2016 and June 30, 2015, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on Pension Plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of both June 30, 2016 and June 30, 2015.

In accordance with GASB 68 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following table presents the net pension liability of the Plan as of June 30, 2016, calculated using the discount rate of 7.50%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount (7.50%)	1% Increase (8.50%)
Net Pension Liability	\$699,920	\$462,859	\$265,218

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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**NOTE 8 – EMPLOYEES’ RETIREMENT PLAN (Continued)**

***H. Public Employees’ Pension Reform Act (PEPRA)***

Assembly Bill 340 (AB 340) created the Public Employees’ Pension Reform Act (PEPRA) that implemented new benefit formulas and final compensation periods, as well as new contribution requirements for new employees hired on or after January 1, 2013, who meet the definition of new member under PEPRA.

The table below provides the details of the new provisions.

Benefit Formula	2.5% at Age 67
Final Compensation Period	Average of last 3 years
Employer Contribution Rate as a percentage payroll	8.65% of Reportable Compensation
Member Contribution Rate as a percentage of payroll	8.75% of Reportable Compensation

The employer contribution rate listed above was in effect until June 30, 2016. In accordance with the provisions of AB 340, the member contribution rate shown above was set at 50 percent of the expected total normal cost rate for the benefits that will apply to new members on January 1, 2013. The total normal cost rate used for this calculation is 44.82% of payroll for new members.

**NOTE 9 – RISK MANAGEMENT**

The District has purchased commercial insurance for general, property, public officials’ liability and workers’ compensation. During the fiscal year ended June 30, 2016, the District paid \$1,547 for current year coverage.

The District’s liability, property, and workers’ compensation risks are insured by commercial insurance carriers, all of which are subject to the District’s self-insurance retentions, which vary by type of coverage.

Selected other coverages are:

Coverage	Policy Limit	Self-insurance retention
Workers' Compensation	Statutory Limit	\$5,000
All risk property (except flood)	\$200,000	500
Flood	25,000	1,500
Liability	90,000	10,000 Water/ 10,000 Wastewater
Crime	10,000	25
Boiler and Machinery	10,000	25
Pardee and Camanche Dams	10,000	50
Main Wastewater Treatment Plant	10,000	50

Settled claims have not exceeded the District’s policy limits in any of the past five fiscal years.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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**NOTE 9 – RISK MANAGEMENT (Continued)**

Claim expenses and liabilities are recorded when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. As of June 30, 2016, the amount of these liabilities was \$47,777. This amount (which has not been discounted) has been actuarially determined and includes an estimate of incurred but not reported losses. Changes in the reported liability are as follows:

	<u>2016</u>	<u>2015</u>
Liability at beginning of year	\$43,499	\$43,397
Current year claims and changes in estimates	12,260	6,863
Payments of claims	<u>(7,982)</u>	<u>(6,761)</u>
Liability at end of year	<u><u>\$47,777</u></u>	<u><u>\$43,499</u></u>
Estimated liability:		
Due within one year	\$9,641	\$8,714
Due in more than one year	<u>38,136</u>	<u>34,785</u>
	<u><u>\$47,777</u></u>	<u><u>\$43,499</u></u>

**NOTE 10 – KNOWN ENVIRONMENTAL MATTERS**

Following is a summary of the District's known environmental matters as of June 30, 2016, that meets the requirements of GASB Statement No. 49:

- Under a NPDES permit issued by the San Francisco Regional Water Quality Control Board, discharges from the District's wet weather facilities are prohibited. In 2014, the District signed a Consent Decree on this matter that focuses on the excess wet weather flow entering the District's system and allows continued discharges while work to reduce them is performed. The Consent Decree requires the District and its seven satellite agencies to do a range of work to reduce flows, including working with property owners to address leaks in their private sewer laterals. The Consent Decree is expected to be in place until 2036, at which time discharges will have ceased. The District's cost to meet the requirements in the Consent Decree is approximately \$5M/year.
- The District submitted a Best Practicable Treatment and Control Evaluation Report to the Central Valley Regional Water Quality Control Board (CVRWQCB) on June 22, 2010 to address potential groundwater impacts from the wastewater treatment facility at Camanche North Shore Recreation Area. Based on the results of this evaluation, the no-action alternative was selected as the preferred alternative because the constituents of concern only slightly exceed recommended target groundwater concentrations and there are no significant impacts upon beneficial uses. Uncertainty exists as to whether or not the CVRWQCB will concur with this recommendation as they have not provided any response to the District's evaluation. If the CVRWQCB does not concur, it is possible that the District will be required to construct wastewater treatment pond upgrades. At this preliminary planning stage, it is estimated that the cost would be approximately \$6.6 million to upgrade the existing facilities, or alternatively, approximately \$7.8 million to construct a joint wastewater project with Amador County.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
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<b>NOTE 10 – KNOWN ENVIRONMENTAL LIABILITIES (Continued)</b>
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- The CVRWQCB has requested that the District and U.S. Bureau of Land Management (BLM) address three abandoned ponds near Camanche Reservoir that contain mine wastes. The District and BLM have both been named as Potential Responsible Parties and are jointly completing this site investigation/remediation project. An Engineering Evaluation/Cost Analysis was completed in 2013 to present remediation alternatives and a Value Engineering (VE) study was completed in 2014 to analyze life-cycle costs of the recommended alternative consistent with required performance, reliability, quality, safety, and achievement of mission priorities. Subsequent to the VE study, BLM risk assessors audited the site to make recommendations for further financial savings. The modified proposal from BLM that incorporates the findings of their risk assessor reduced initial project costs significantly and still addressed the key environmental concerns, which was well received by the CVRWQCB. The final site remedy and cost allocations between the District and BLM have yet to be determined.
- The CVRWQCB has requested that the District address elevated concentrations of petroleum hydrocarbons in soil and groundwater associated with former underground storage tanks (USTs) at the District's Bixler facility. The District has completed significant site investigation work, including groundwater and soil gas monitoring, and requested closure of the site from the CVRWQCB. In early 2015, the CVRWQCB requested one more round of ground water monitoring at the site before they can consider closure. The additional monitoring was completed in summer 2015. On March 30, 2016, the CVRWQCB publicly noticed the site for closure. The public comment period closed on May 30, 2016, with no comments received. On July 12, 2016, the CVRWQCB provided notice that there were no objections to closure and the District should proceed with destruction of onsite monitoring wells by December 30, 2016, after which final closure may be finalized.
- The Alameda County Environmental Health Agency (County) requested that the District conduct additional site investigations at the Adeline Maintenance Center (AMC) Shops to further define the extent of petroleum hydrocarbons in soil and groundwater associated with former USTs. The District completed additional site investigations in accordance with an approved work plan in 2009. The results indicate that elevated concentrations of petroleum hydrocarbons still remain in onsite soil and groundwater in localized areas near the former USTs. In June 2016 the County requested that the District conduct a Sensitive Receptor Survey for the AMC Shops parcel as well as a Site Conceptual Model for the Anderson Building (located within the AMC complex parcel) and that all environmental data collected during previous investigations be posted to the State's GeoTracker website in electronic format, followed by a meeting with the County to agree upon final actions necessary to obtain regulatory closure of the site under the State Water Resource Control Board's Low Threat Closure Policy.
- On April 8, 2015, approximately 170 cubic yards of cellular concrete being used at a District construction site was accidentally released into a storm drain in Oakland, CA. The incident occurred when cellular concrete was being added to a 1,500 foot segment of an abandoned 24-inch water main line. The cellular concrete flowed through enclosed storm drain pipes and open creek channels following the release. District staff immediately initiated emergency response and an incident command structure to commence cleanup of the creek; the cleanup took approximately 4 weeks. The cleanup phase has transitioned into a long term restoration phase which is projected to include approximately three years of monitoring at the site to confirm status of water quality and resident biota. Enforcement negotiation is in progress with regulatory agencies for this incident. Penalty amount is anticipated to be approximately \$425,000.

**EAST BAY MUNICIPAL UTILITY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
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**NOTE 10 – KNOWN ENVIRONMENTAL LIABILITIES (Continued)**

- In October 2015, November 2015, and May 2016 the District experienced unplanned emergency potable water discharges associated with water main breaks. In each of these cases, the potable water releases reached local waterways and resulted in fish kills despite rapid staff response and deployment of industry best management practices to the maximum extent feasible to minimize impacts. The District is in the process of enforcement negotiation with the regulatory agencies for these incidents. Penalty amount is unknown at this time.
- The District operates many facilities throughout Northern California that have NPDES permits, waste discharge requirements, and air permits. The total estimated liability for all known violations is less than \$350,000.

**NOTE 11 - CONTINGENT LIABILITIES**

The District is a defendant in a number of lawsuits which have arisen in the normal course of business including challenges over certain rates and charges. The ultimate outcome of these matters is not presently determinable. In the opinion of the District, these actions when finally adjudicated will not have a material adverse effect on the financial position of the District.

**NOTE 12 – COMMITMENTS AND CONTINGENCIES**

***Central Valley Project***

In December 1970, the District entered into a contract with the US Bureau of Reclamation for access to up to 150,000 acre feet per year of Central Valley Project (CVP) water from a diversion point on the American River. The successor contract, the Long Term Renewal Contract, was executed in April 2006 with a 40 year term. The Long Term Renewal Contract provides for delivery of up to 133,000 acre feet per year of CVP water in dry years to supplement the District's surface water supplies. Deliveries to the District are limited to a 165,000 acre foot total over any three successive dry years. In years in which the District takes delivery of CVP water, the District's allocated CVP capital cost and the District's operations and maintenance deficit balance will be paid down commensurately with the quantity of water delivered. For example, if the District had to take delivery of 80,000 acre feet in fiscal year 15, the District's CVP capital and deficit balances would each be reduced by approximately 20%. The balances must be paid off by 2030.

## **REQUIRED SUPPLEMENTAL INFORMATION**

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**EAST BAY MUNICIPAL UTILITY DISTRICT  
REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016  
(Dollars in thousands)**

**(1) Pension Plan**

Schedule of Changes in Employer's Net Pension Liability (in thousands):

	2016	2015	2014
<b>Total pension liability</b>			
Service cost	\$36,791	\$34,987	\$34,857
Interest	131,595	127,558	120,810
Change of benefit terms			
Differences between expected and actual experience	(1,390)	438	(402)
Changes of assumptions		18,421	
Benefit payments, including refunds of employee contributions	(77,790)	(71,232)	(65,427)
<b>Net change in total pension liability</b>	89,206	110,172	89,838
<b>Total pension liability - beginning</b>	1,756,706	1,646,534	1,556,696
<b>Total pension liability - ending (a)</b>	<u>\$1,845,912</u>	<u>\$1,756,706</u>	<u>\$1,646,534</u>
<b>Plan fiduciary net position</b>			
Contributions - employer	\$64,177	\$61,660	\$53,795
Contributions - employee	13,260	11,963	10,427
Net investment income	59,288	216,601	136,630
Benefit payments, including refunds of employee contributions	(77,790)	(71,232)	(65,427)
Administrative expense	(1,269)	(1,233)	(1,200)
<b>Net change in plan fiduciary net position</b>	57,666	217,759	134,225
<b>Plan fiduciary net position - beginning</b>	1,325,387	1,107,628	973,403
<b>Plan fiduciary net position - ending (b)</b>	<u>\$1,383,053</u>	<u>\$1,325,387</u>	<u>\$1,107,628</u>
<b>Plan's net pension liability - ending (a) - (b)</b>	<u>\$462,859</u>	<u>\$431,319</u>	<u>\$538,906</u>

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT  
REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016  
(Dollars in thousands)**

**(2) Pension Plan**

Schedule of Employer's Net Pension Liability (in thousands):

	2016	2015	2014
Total pension liability	\$1,845,912	\$1,756,706	\$1,646,534
Plan fiduciary net position	<u>(1,383,053)</u>	<u>(1,325,387)</u>	<u>(1,107,628)</u>
Net pension liability	<u>\$462,859</u>	<u>\$431,319</u>	<u>\$538,906</u>
Plan fiduciary net position as a percentage of total pension liability	74.93%	75.45%	67.27%
Covered employee payroll	\$179,991	\$173,111	\$166,762
Plan net pension liability as percentage of covered employee payroll	257.16%	249.16%	323.16%

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

**(3) Pension Plan**

Schedule of Employer's Contributions (in thousands):

Year ended June 30	Actuarially determined contributions	Contributions in relation to the actuarially determined contributions	Contributions deficiency (excess)	Covered-employee payroll *	Contributions as a percentage of covered employee payroll
2006	\$30,600	\$30,600	0	\$142,991	21.40%
2007	33,698	33,698	0	145,125	23.22%
2008	37,387	37,387	0	152,538	24.51%
2009	39,485	39,485	0	158,193	24.96%
2010	44,031	44,031	0	161,641	27.24%
2011	50,987	50,987	0	160,336	31.80%
2012	52,156	52,156	0	158,481	32.91%
2013	53,795	53,795	0	166,762	32.26%
2014	61,660	61,660	0	173,111	35.62%
2015	64,177	64,177	0	179,991	35.66%

\* "Derived" by dividing the contributions in relation to the actuarial determined contributions by the contributions as a percentage of covered employee payroll. These amounts may therefore be different from the actual payrolls of the District.

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT  
REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEAR ENDED JUNE 30, 2016  
(Dollars in thousands)**

**(4) Pension Plan**

Schedule of Investment Returns:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money weighted rate of return, net of investment expense	4.46%	6.67%	19.42%

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

**(5) Post-Employment Healthcare Plan**

Schedule of funding progress for the post-employment healthcare plan (in thousands):

Actuarial valuation date	Actuarial value of assets (a)	Actuarial liability (AAL) – entry age (b)	Unfunded AAL (UAAL) (b-a)	Funded ratio (a/b)	Covered payroll (c)	UAAL as a percentage of covered payroll ((b-a)/c)
6/30/2006	\$3,608	\$71,409	\$67,801	5.1%	\$142,373	47.6%
6/30/2007	4,208	105,409	101,201	4.0%	153,394	66.0%
6/30/2008	7,010	137,055	130,045	5.1%	158,499	82.0%
6/30/2009	7,354	130,245	122,891	5.6%	161,893	75.9%
6/30/2010	10,061	135,379	125,318	7.4%	164,085	76.4%
6/30/2011	12,048	135,360	123,312	8.9%	159,505	77.3%
6/30/2012	14,240	138,240	123,999	10.3%	158,847	78.1%
6/30/2013	16,522	138,120	121,598	12.0%	159,246	76.4%
6/30/2014	19,634	140,416	120,782	14.0%	167,196	72.2%
6/30/2015	23,179	143,946	120,767	16.1%	174,899	69.0%

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION**  
**FOR THE YEAR ENDED JUNE 30, 2016**  
**(Dollars in thousands)**

**(6) Notes to Required Supplementary Information**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2015
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; experience gains/losses are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment rate of return	7.75%
Average projected salary increases*	Ranges from 4.25% to 9.75% based on years of service*
Inflation rate	3.25%
Cost-of-living adjustments	3.15%
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with scale AA to 2016, set back one year for males and set back two years for females
Annual healthcare costs trend rates	6.625% reduced by increments to a rate of 5% after 10 years

*\* Includes inflation of 3.00% plus across the board salary increases of 0.50% plus merit and promotional increases*

All assumptions are the same for the post-employment health care benefits except for the discount rate, assumed at a rate of 7.50%, for the funded and unfunded portions.

Unaudited.

## **SUPPLEMENTAL INFORMATION**

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EAST BAY MUNICIPAL UTILITY DISTRICT  
EMPLOYEE RETIREMENT SYSTEM TRUST FUND  
COMBINING BALANCE SHEET

June 30, 2016

(With summarized comparative financial information as of June 30, 2015)

(DOLLARS IN THOUSANDS)

	2016			2015
	Pension plan	Post-employment healthcare	Total	Total
	benefits	benefits		
Assets:				
Cash and cash equivalents, at fair value	\$39,927	\$730	\$40,657	\$30,214
Invested securities lending collateral	117,124	2,141	119,265	108,548
Prepaid expenses		502	502	495
Receivables:				
Brokers, securities sold	1,418	26	1,444	5,839
Employer	3,282	488	3,770	3,220
Plan members	781		781	634
Interest and dividends	2,197	40	2,237	2,463
Total receivables	7,678	554	8,232	12,156
Investments, at fair value:				
U.S. government obligations	81,548	1,491	83,039	73,600
Municipal bonds	2,325	42	2,367	2,250
Domestic corporate bonds	148,077	2,707	150,784	160,942
International bonds	19,893	364	20,257	18,181
Domestic stocks	839,161	15,340	854,501	826,471
International stocks	180,281	3,296	183,577	220,157
Real estate	81,647	1,493	83,140	73,949
Total investments	1,352,932	24,733	1,377,665	1,375,550
Total assets	1,517,661	28,660	1,546,321	1,526,963
Liabilities:				
Accounts payable and accrued expenses	1,723	32	1,755	1,688
Payables to brokers, securities purchased	7,043	129	7,172	9,518
Securities lending collateral	117,124	2,141	119,265	108,548
Total liabilities	125,890	2,302	128,192	119,754
Net position held in trust for pension benefits and post-employment healthcare benefits.	\$1,391,771	\$26,358	\$1,418,129	\$1,407,209

See accompanying notes to financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT  
EMPLOYEES' RETIREMENT SYSTEM TRUST FUND  
COMBINING STATEMENT OF CHANGES IN NET POSITION

For the Year Ended June 30, 2016

(With summarized comparative financial information for the year ended June 30, 2015)

(DOLLARS IN THOUSANDS)

	2016			2015
	Pension plan benefits	Post- employment healthcare benefits	Total	Total
Additions:				
Contributions:				
Employer	\$65,218	\$9,454	\$74,672	\$73,141
Plan members	14,741	184	14,925	13,427
Total contributions	<u>79,959</u>	<u>9,638</u>	<u>89,597</u>	<u>86,568</u>
Investment income:				
Net (depreciation)				
in fair value of investments:				
Traded securities	(9,933)	(189)	(10,122)	38,801
Real estate	2,597	49	2,646	2,292
Interest	5,769	110	5,879	4,330
Dividends	18,985	361	19,346	18,768
Real estate operating (loss), net	<u>1,078</u>	<u>20</u>	<u>1,098</u>	<u>1,056</u>
	<u>18,496</u>	<u>351</u>	<u>18,847</u>	<u>65,247</u>
Less:				
Investment expense	(4,219)	(74)	(4,293)	(4,916)
Borrowers' rebates and other agent fees on securities lending transactions	<u>(343)</u>	<u>(6)</u>	<u>(349)</u>	<u>(105)</u>
Net investment (loss)	<u>13,934</u>	<u>271</u>	<u>14,205</u>	<u>60,226</u>
Total additions, net	<u>93,893</u>	<u>9,909</u>	<u>103,802</u>	<u>146,794</u>
Deductions:				
Benefits paid	83,467	7,685	91,152	84,981
Refund of contributions	419		419	203
Administrative expenses	<u>1,289</u>	<u>22</u>	<u>1,311</u>	<u>1,289</u>
Total deductions	<u>85,175</u>	<u>7,707</u>	<u>92,882</u>	<u>86,473</u>
Change in net position	8,718	2,202	10,920	60,321
Net position:				
Beginning of year	<u>1,383,053</u>	<u>24,156</u>	<u>1,407,209</u>	<u>1,346,888</u>
End of year	<u>\$1,391,771</u>	<u>\$26,358</u>	<u>\$1,418,129</u>	<u>\$1,407,209</u>

See accompanying notes to financial statements

**INDEPENDENT AUDITOR'S REPORT ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING  
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN  
AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE  
WITH *GOVERNMENT AUDITING STANDARDS***

Board of Directors  
East Bay Municipal Utility District  
Oakland, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the basic financial statements of the East Bay Municipal Utility District, as of and for the year ended June 30, 2016 and the related notes to the financial statements, and have issued our report thereon dated August 31, 2016. Our report included an emphasis of a matter paragraph disclosing the implementation of a new accounting principle.

***Internal Control Over Financial Reporting***

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### ***Compliance and Other Matters***

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We have also issued a separate Memorandum on Internal Control dated August 31, 2016 which is an integral part of our audit and should be read in conjunction with this report.

### ***Purpose of this Report***

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*Maze + Associates*

Pleasant Hill, California  
August 31, 2016

## APPENDIX C

### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

*The following is a summary of certain provisions of the Indenture. This summary reflects amendments to the Indenture that will become effective upon the issuance of the Series 2017A Bonds. This summary is not to be considered a full statement of the terms of the Indenture and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not defined in this summary or elsewhere in the Official Statement have the respective meanings set forth in the Indenture.*

*There are no senior Wastewater Bonds outstanding, and the District has covenanted in the Indenture not to issue any senior Wastewater Bonds in the future. Therefore, all references hereto to “Wastewater Bonds” may be disregarded.*

#### **Certain Definitions**

**“Accreted Value”** means, with respect to any Capital Appreciation Indebtedness, the principal amount thereof plus the interest accrued thereon, compounded at the interest rate thereon on each date as specified in the Indenture.

**“Act”** means the Municipal Utility District Act, constituting Division 6 of the Public Utilities Code of the State of California, and all laws of the State of California amendatory thereof or supplemental thereto, including the Revenue Bond Law of 1941, as made applicable by Article 6a of Chapter 6 of said Division 6, and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California.

**“Annual Debt Service”** means, for any Fiscal Year, the aggregate amount of principal and interest on all Wastewater Bonds, Bonds and Parity Debt becoming due and payable during such Fiscal Year calculated using the principles and assumptions set forth under the definition of Debt Service.

**“Assumed Debt Service”** means, for any Fiscal Year, the aggregate amount of principal and interest which would be payable on all Wastewater Bonds, Bonds and Parity Debt if each Excluded Principal Payment were amortized for a period specified by the District (but no longer than thirty (30) years from the date of the issuance of the Wastewater Bonds, Bonds or Parity Debt to which such Excluded Principal Payment relates) on a substantially level debt service basis or other amortization basis provided by the District, calculated based on a fixed interest rate equal to the rate at which the District could borrow for such period, as certified by a certificate of a financial advisor or investment banker delivered to the Trustee, who may rely conclusively on such certificate, within thirty (30) days of the date of calculation.

**“Bond Obligation”** means, as of any given date of calculation, (1) with respect to any Outstanding Bond or Wastewater Bond which is Current Interest Indebtedness, the principal amount thereof, and (2) with respect to any Outstanding Bond or Wastewater Bond which is Capital Appreciation Indebtedness, the Accreted Value thereof.

**“Bonds”** means the bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

**“Business Day”** means any day other than (1) a Saturday, Sunday, or a day on which banking institutions in the State of California or the State of New York are authorized or obligated by law or executive order to be closed, and (2) for purposes of payments and other actions related to Bonds secured

by a letter of credit, a day upon which commercial banks in the city in which is located the office of the issuing bank at which demands for payment under the letter of credit are to be presented are authorized or obligated by law or executive order to be closed.

**“Capital Appreciation Indebtedness”** means Wastewater Bonds, Bonds and Parity Debt on which interest is compounded and paid less frequently than annually.

**“Code”** means the Internal Revenue Code of 1986, and the regulations applicable thereto or issued thereunder, as amended from time to time.

**“Current Interest Indebtedness”** means the Wastewater Bonds, Bonds and Parity Debt on which interest is paid at least annually.

**“Debt Service”** means, the amount of principal and interest becoming due and payable on all Wastewater Bonds, Bonds and Parity Debt provided, however, for the purpose of computing Debt Service:

(a) Excluded Principal Payments shall be excluded from such calculation and Assumed Debt Service shall be included in such calculation;

(b) if the Wastewater Bonds, Bonds or Parity Debt are Variable Rate Indebtedness, the interest rate thereon for periods when the actual interest rate cannot yet be determined shall be assumed to be equal to the average of the SIFMA Municipal Swap Index for the five (5) years preceding such date of calculation (provided, however, that if such index is no longer published, the interest rate on such Wastewater Bonds, Bonds or Parity Debt shall be calculated based upon such similar index as the District shall designate in writing to the Trustee) (the “Assumed SIFMA-based Rate”);

(c) principal and interest payments on Wastewater Bonds, Bonds and Parity Debt shall be excluded to the extent such payments are to be paid from amounts on deposit with the Trustee or another fiduciary in escrow or trust specifically therefor and to the extent that such interest payments are to be paid from the proceeds of Wastewater Bonds, Bonds or Parity Debt held by the Trustee or another fiduciary as capitalized interest;

(d) in determining the principal amount, payment shall (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made in accordance with any amortization schedule established for such debt, including any Mandatory Sinking Account Payments or any scheduled redemption or payment of Wastewater Bonds, Bonds or Parity Debt on the basis of Accreted Value, and for such purpose, the redemption payment or payment of Accreted Value shall be deemed a principal payment and interest that is compounded and paid as Accreted Value shall be deemed due on the scheduled redemption or payment date of such Capital Appreciation Indebtedness;

(e) if any interest rate swap agreement is in effect with respect to, and the regularly scheduled payments thereunder are payable on a parity with, the Wastewater Bonds, Bonds or Parity Debt to which it relates, interest deemed to be payable on any such Wastewater Bonds, Bonds or Parity Debt with respect to which an interest rate swap agreement is in effect shall be based on the net economic effect expected by the District to be produced by the terms of such Wastewater Bonds, Bonds or Parity Debt and such interest rate swap agreement, including but not limited to the effects that (i) such Wastewater Bonds, Bonds or Parity Debt would, but for such interest rate swap agreement, be treated as Variable Rate Indebtedness instead shall be treated as

Wastewater Bonds, Bonds or Parity Debt bearing interest at a fixed interest rate, and (ii) such Wastewater Bonds, Bonds or Parity Debt would, but for such interest rate swap agreement, be treated as Wastewater Bonds, Bonds or Parity Debt bearing interest at a fixed interest rate instead shall be treated as Variable Rate Indebtedness; and accordingly, the amount of interest deemed to be payable on any Wastewater Bonds, Bonds or Parity Debt with respect to which an interest rate swap agreement is in force shall be an amount equal to the amount of interest that would be payable at the rate or rates stated in such Wastewater Bonds, Bonds or Parity Debt plus the amounts payable by the District under such interest rate swap agreement, minus the amounts receivable by the District under such interest rate swap agreement, and for the purpose of calculating as nearly as practicable such amounts, the following assumptions shall be made:

(1) if an interest rate swap agreement has been entered into by the District with respect to Wastewater Bonds, Bonds or Parity Debt providing for the payment of a net variable interest rate under such interest rate swap agreement with respect to such Wastewater Bonds, Bonds or Parity Debt by the District, the interest rate on such Wastewater Bonds, Bonds or Parity Debt for future periods when the actual interest rate cannot yet be determined shall be assumed (but only during the period the interest rate swap agreement is in effect) to be equal to the sum of (A) the fixed rate or rates stated in such Wastewater Bonds, Bonds or Parity Debt minus (B) the fixed rate paid by the counterparty of such interest rate swap agreement to the District, plus (C) the lesser of (x) the interest rate cap, if any, provided by a counterparty with respect to such interest rate swap agreement (but only during the period that such interest rate cap is in effect) and (y) the applicable variable interest rate calculated in accordance with paragraph (b) above; and

(2) if an interest rate swap agreement has been entered into by the District with respect to Wastewater Bonds, Bonds or Parity Debt providing for the payment of a fixed rate of interest to maturity or for a specific term under such interest rate swap agreement with respect to such Wastewater Bonds, Bonds or Parity Debt by the District, the interest on such Wastewater Bonds, Bonds or Parity Debt shall be included in the calculation of payments (but only during the period the interest rate swap agreement is in effect) by including for each period of calculation an amount equal to the amount of interest payable at the fixed interest rate pursuant to such interest rate swap agreement.

Notwithstanding any other paragraph of this definition of Debt Service, except as set forth in this paragraph (e), no amounts payable under any interest rate swap agreement (including termination payments) shall be included in the calculation of Debt Service;

(f) if any Wastewater Bonds, Bonds or Parity Debt are Variable Rate Indebtedness subject to tender for purchase and funds for the purchase price may be provided by a letter of credit, line of credit, revolving credit agreement, standby bond purchase agreement or other liquidity facility which, if drawn upon, could create a repayment obligation which has a lien on Subordinated Wastewater Revenues on parity with the lien of the Wastewater Bonds, Bonds or Parity Debt, then for purposes of determining the amounts of principal due in any Fiscal Year on such Wastewater Bonds, Bonds or Parity Debt, (i) the options or obligations of the owners of such Wastewater Bonds, Bonds or Parity Debt to tender the same for purchase or payment prior to the stated maturity or maturities shall be ignored and not treated as a principal maturity; and (ii) any repayment obligations of the District to the provider of such letter of credit, line of credit, revolving credit agreement, standby bond purchase agreement or other liquidity facility, other than its obligations on such Wastewater Bonds, Bonds or Parity Debt, shall be treated as Excluded Principal Payments; and

(g) if interest on any Wastewater Bonds, Bonds or Parity Debt is reasonably anticipated to be reimbursed to the District by the United States of America pursuant to Section 54AA of the Code, or any future similar program, then interest payments with respect to such Wastewater Bonds, Bonds or Parity Debt shall be reduced by the amount of such interest reasonably anticipated to be paid or reimbursed by the United States of America.

**“Excluded Principal Payments”** means each payment of principal (or the principal component of lease or installment purchase payments) of Wastewater Bonds, Bonds or Parity Debt which the District determines on a date not later than the date of issuance thereof that the District intends to pay with moneys which are not Wastewater Revenues or Subordinated Wastewater Revenues but from the proceeds of future debt obligations of the District and the Trustee may rely conclusively on such determination of the District.

**“Fiscal Year”** means the period beginning on July 1 of each year and ending on the next succeeding June 30, or any other twelve-month period selected and designated as the official fiscal year period of the District, which designation shall be provided to the Trustee in a certificate of the District.

**“Indenture”** means the Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, by and between the Trustee and the District, as originally executed or as it may from time to time be supplemented or amended by any Supplemental Indenture delivered pursuant to the provisions thereof.

**“Investment Securities”** means the following:

(i) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are unconditionally guaranteed by, the United States of America, including obligations of any of the Federal agencies and Federally sponsored entities set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;

(ii) any certificates, receipts, securities or other obligations evidencing ownership of, or the right to receive, a specified portion of one or more interest payments or principal payments, or any combination thereof, to be made on any bond, note, or other obligation described above in clause (i);

(iii) obligations of the Federal National Mortgage Association, the Government National Mortgage Association, Federal Home Loan Banks and Federal Home Loan Mortgage Corporation;

(iv) obligations of any state, territory or commonwealth of the United States of America or any political subdivision thereof or any agency or department of the foregoing; provided that at the time of their purchase such obligations are rated not lower than their respective ratings on the Bonds by Moody’s (if Moody’s is then rating the Bonds) and Standard & Poor’s (if Standard & Poor’s is then rating the Bonds);

(v) any bonds or other obligations of any state of the United States of America or any political subdivision thereof (a) which are not callable prior to maturity or as to which irrevocable instructions have been given to the trustee of such bonds or their obligations by the obligor to give due notice of redemption and to call such bonds for redemption on the date or dates specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described above in clause (i), (ii) or (iii) which fund may be applied only to the

payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the interest payment dates and the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, (c) as to which the principal of and interest on the bonds and obligations of the character described above in clause (i), (ii) or (iii) which have been deposited in such fund along with any cash on deposit in such fund are sufficient to pay the principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (v) on the interest payment dates and the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (v), as appropriate, and (d) which have been rated not lower than their respective ratings on the Bonds by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds);

(vi) bonds, notes, debentures or other evidences of indebtedness issued or guaranteed by any corporation which are, at the time of purchase, rated by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds) in their respective highest short-term Rating Categories, or, if the term of such indebtedness is longer than three (3) years, rated not lower than their respective ratings on the Bonds by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds);

(vii) demand or time deposits or certificates of deposit, whether negotiable or nonnegotiable, issued by any bank or trust company organized under the laws of any state of the United States of America or any national banking association (including the Trustee), provided that such certificates of deposit shall be purchased directly from such a bank, trust company or national banking association and shall be either (1) continuously and fully insured by the Federal Deposit Insurance Corporation, or (2) continuously and fully secured by such securities and obligations as are described above in clauses (i) through (iv), inclusive, which shall have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit and shall be lodged with the Trustee, as custodian, by the bank, trust company or national banking association issuing such certificates of deposit, and the bank, trust company or national banking association issuing each such certificate of deposit required to be so secured shall furnish the Trustee with an undertaking satisfactory to it that the aggregate market value of all such obligations securing each such certificate of deposit will at all times be an amount equal to the principal amount of each such certificate of deposit and the Trustee shall be entitled to rely on each such undertaking;

(viii) taxable commercial paper or tax-exempt commercial paper rated in their respective highest Rating Categories by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds);

(ix) variable rate obligations required to be redeemed or purchased by the obligor or its agent or designee upon demand of the holder thereof secured as to such redemption or purchase requirement by a liquidity agreement with a corporation and as to the payment of interest and principal either upon maturity or redemption (other than upon demand by the holder thereof) thereof by an unconditional credit facility of a corporation, provided that the variable rate obligations themselves are rated in their respective highest Rating Categories for its short-term rating, if any, and not lower than their respective ratings on the Bonds for its long-term rating, if any, by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds), and that the corporations providing the liquidity agreement and credit facility have, at the date of acquisition of the variable rate obligation by the Trustee, an outstanding issue of unsecured, uninsured and unguaranteed debt obligations rated not lower than

their respective ratings on the Bonds by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds);

(x) any repurchase agreement with any bank or trust company organized under the laws of any state of the United States or any national banking association (including the Trustee) having a minimum permanent capital of one hundred million dollars (\$100,000,000) and with short-term debt rated by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds) in their respective four highest short-term rating categories or government bond dealer reporting to, trading with, and recognized as a primary dealer by the Federal Reserve Bank of New York, which agreement is secured by any one or more of the securities and obligations described in clauses (i), (ii) or (iii) above, which shall have a market value (exclusive of accrued interest and valued at least monthly) at least equal to the principal amount of such investment and shall be lodged with the Trustee or other fiduciary, as custodian for the Trustee, by the bank, trust company, national banking association or bond dealer executing such repurchase agreement, and the entity executing each such repurchase agreement required to be so secured shall furnish the Trustee with an undertaking satisfactory to it that the aggregate market value of all such obligations securing each such repurchase agreement (as valued at least monthly) will be an amount equal to the principal amount of each such repurchase agreement and the Trustee shall be entitled to rely on each such undertaking;

(xi) any cash sweep or similar account arrangement of or available to the Trustee, the investments of which are limited to investments described in clauses (i), (ii), (iii), (iv) and (x) of this definition of Investment Securities and any money market fund, the entire investments of which are limited to investments described in clauses (i), (ii), (iii), (iv) and (x) of this definition of Investment Securities and which money market fund is rated in their respective highest Rating Categories by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds); provided that as used in this clause (xi) and clause (xii) investments will be deemed to satisfy the requirements of clause (x) if they meet the requirements set forth in clause (x) ending with the words "clauses (i), (ii) or (iii) above" and without regard to the remainder of such clause (x);

(xii) a guaranteed investment contract with a financial institution or insurance company which has at the date of execution thereof an outstanding issue of unsecured, uninsured and unguaranteed debt obligations or a claims paying ability rated not lower than their respective ratings on the Bonds by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds);

(xiii) shares of beneficial interest in diversified management companies investing exclusively in securities and obligations described in clauses (i) through (xii) of this definition of Investment Securities and which companies are rated in their respective highest Rating Categories by Moody's (if Moody's is then rating the Bonds) and Standard & Poor's (if Standard & Poor's is then rating the Bonds) or have an investment advisor registered with the Securities and Exchange Commission with not less than five years' experience investing in such securities and obligations and with assets under management in excess of \$500,000,000; and

(xiv) any investment approved by the Board for which confirmation is received from each rating agency then rating any of the Bonds that such investment will not adversely affect such agency's rating on such Bonds.

**"Mandatory Sinking Account Payment"** means the amount required to be deposited by the District in a sinking account for the payment of term Bonds.

**“Maximum Annual Debt Service”** means, the greatest amount of principal and interest becoming due and payable on all Wastewater Bonds, Bonds and Parity Debt in the Fiscal Year in which the calculation is made or any subsequent Fiscal Year calculated using the principles and assumptions set forth under the definition of Debt Service.

**“Moody’s”** means Moody’s Investors Service, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Moody’s” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District and not objected to by the Trustee.

**“Opinion of Bond Counsel”** means a written opinion of a law firm of national standing in the field of public finance selected by the District and not objected to by the Trustee.

**“Outstanding,”** when used at any particular time with reference to Bonds, means (subject to the provisions relating to disqualified bonds) all Bonds theretofore, or thereupon being, authenticated and delivered by the Trustee under the Indenture except (1) Bonds theretofore cancelled by the Trustee or surrendered to the Trustee for cancellation; (2) Bonds with respect to which all liability of the District shall have been discharged under the Indenture; and (3) Bonds for the transfer or exchange of or in lieu of or in substitution for which other Bonds shall have been authenticated and delivered by the Trustee pursuant to the Indenture.

**“Owner” or “Bondholder” or “Bondowner,”** whenever used with respect to a Bond, means the person in whose name such Bond is registered.

**“Parity Debt”** means any indebtedness, installment sale obligation, lease obligation or other obligation of the District for borrowed money or interest rate swap agreement having an equal lien and charge upon the Subordinated Wastewater Revenues and therefore payable on a parity with the Bonds (whether or not any Bonds are Outstanding).

**“Person”** means a corporation, firm, association, partnership, trust, or other legal entity or group of entities, including a governmental entity or any agency or political subdivision thereof.

**“Rating Category”** means (i) with respect to any long-term rating category, all ratings designated by a particular letter or combination of letters, without regard to any numerical modifier, plus or minus sign or other modifier and (ii) with respect to any short-term or commercial paper rating category, all ratings designated by a particular letter or combination of letters and taking into account any numerical modifier, but not any plus or minus sign or other modifier.

**“Redemption Price”** means with respect to any Bond (or portion thereof) the principal amount of such Bond (or portion thereof) plus the applicable premium, if any, payable upon redemption thereof pursuant to the provisions of such Bond and the Indenture.

**“Revenue Fund”** means the fund held in trust by the District to which the Subordinated Wastewater Revenues are required to be deposited.

**“Series”** whenever used with respect to Bonds, means all of the Bonds designated as being of the same series, authenticated and delivered in a simultaneous transaction, regardless of variations in maturity, interest rate, redemption and other provisions, and any Bonds thereafter authenticated and delivered upon transfer or exchange or in lieu of or in substitution for (but not to refund) such Bonds as provided in the Indenture.

**“SIFMA Municipal Swap Index”** means, on any date, a rate determined on the basis of the seven-day high grade market index of tax-exempt variable rate demand obligations, as produced by Municipal Market Data and published or made available by the Securities Industry & Financial Markets Association (formerly the Bond Market Association) (“SIFMA”) or by any Person acting in cooperation with or under the sponsorship of SIFMA and effective from such date.

**“Standard & Poor’s”** means Standard & Poor’s Corporation, a corporation duly organized and existing under and by virtue of the laws of the State of New York, and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Standard & Poor’s” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District and not objected to by the Trustee.

**“Subordinated Wastewater Revenues”** for any fiscal period means the sum of (a) the Wastewater Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by the District from the Rate Stabilization Fund created in the Wastewater Bond Resolution for treatment as Wastewater Revenues for such fiscal period, less the sum of (c) all Wastewater Operation and Maintenance Costs for such fiscal period, (d) the amounts, if any, withdrawn by the District from Wastewater Revenues for such fiscal period for deposit in such Rate Stabilization Fund, and (e) all amounts required to be paid under the Wastewater Bond Resolution for principal, interest, reserve fund and any other debt service requirements on the Wastewater Bonds as the same become due and payable.

**“Variable Rate Indebtedness”** means any indebtedness the interest rate on which is not fixed at the time of incurrence of such indebtedness, and has not at some subsequent date been fixed, at a single numerical rate for the entire term of the indebtedness.

**“Wastewater Bond Resolution”** means Resolution No. 30051 of the District, adopted on January 26, 1982, as amended and supplemented from time to time. All obligations of the District under the Wastewater Bond Resolution have ceased and been discharged; provided, however, that the Rate Stabilization Fund created thereunder shall continue.

**“Wastewater Bonds”** means all bonds and other obligations of the District issued pursuant to the Wastewater Bond Resolution.

**“Wastewater Operation and Maintenance Costs”** means the reasonable and necessary costs of maintaining and operating the Wastewater System, calculated on sound accounting principles, including (among other things) the reasonable expenses of management, repair and other expenses necessary to maintain and preserve the Wastewater System in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes and other similar costs, but excluding in all cases depreciation and obsolescence charges or reserves therefor and amortization of intangibles or other bookkeeping entries of a similar nature, and excluding all costs paid from the proceeds of taxes received by the District.

**“Wastewater Revenues”** means, all charges received for, and all other income and receipts derived by the District from, the operation of the Wastewater System, or arising from the Wastewater System, together with income from the investment of any moneys in any fund or account established under the Wastewater Bond Resolution or the Indenture; provided, however, there shall be excluded therefrom any amounts reimbursed to the District by the United States of America pursuant to Section 54AA of the Code, or any future similar program.

**“Wastewater System”** means the entire sewage disposal system of Special District No. 1 of the District and all of the facilities thereof, including all facilities for the disposal of sewage, sewage

treatment works, wastewater disposal facilities, sludge treatment facilities, intercepting and outfall sewers, power generation facilities, and other facilities necessary or convenient for the collection, treatment or disposition of sewage and wastewater for Special District No. 1 of the District, together with all additions, betterments, extensions and improvements to said system or any part thereof.

### **Pledge of Revenues**

The Bonds are revenue obligations of the District and are payable as to both principal and interest, and any premium upon redemption thereof, exclusively from the Subordinated Wastewater Revenues and other amounts held by the Trustee (except for amounts held in the Rebate Fund). The Subordinated Wastewater Revenues are pledged to the payment of Bonds and Parity Debt without priority or distinction of one over the other. Said pledge constitutes a first lien on the Subordinated Wastewater Revenues and such other amounts referred to in this paragraph.

### **Allocation of Subordinated Wastewater Revenues**

The District is to transfer the moneys in the Revenue Fund, into the following respective funds, in the following amounts, in the following order of priority, the requirements of each such fund (including the making up of any deficiencies in any such fund resulting from lack of Subordinated Wastewater Revenues sufficient to make any earlier required deposit) at the time of deposit to be satisfied before any deposit is made to any fund subsequent in priority.

(1) Interest Fund. The District shall transfer to the Trustee and the Trustee shall set aside in the Interest Fund on or before the Business Day prior to each interest payment date therefor an amount equal to the interest becoming due and payable on the Outstanding Bonds which are Current Interest Indebtedness (excluding any interest for which there are moneys on deposit in the Interest Fund from the proceeds of any Series of Bonds or other source to pay such interest).

(2) Principal Fund; Sinking Accounts. The District shall transfer to the Trustee and the Trustee shall set aside in the Principal Fund on or before the Business Day prior to each principal or Sinking Account payment date therefor an amount equal to (a) the amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds, plus (b) the Mandatory Sinking Account Payments to be paid into the respective Sinking Accounts for the Term Bonds; provided that if the District certifies to the Trustee that any principal payments are expected to be refunded on or prior to their respective due dates or paid from excess amounts on deposit in a bond reserve fund upon such payment, no amounts need be set aside towards such principal to be so refunded or paid. All of the aforesaid Mandatory Sinking Account Payments shall be made without priority of any payment into any one such Sinking Account over any other such payment.

(3) Bond Reserve Funds. Upon the occurrence of any deficiency in any Bond Reserve Fund established under the Indenture for any Series of Bonds, the District shall transfer to the Trustee and the Trustee shall set aside in such Bond Reserve Fund an amount equal to the aggregate amount of each unreplenished prior withdrawal from the Bond Reserve Fund until there is on deposit in such Bond Reserve Fund an amount equal to the respective reserve requirement.

Any Subordinated Wastewater Revenues remaining after the foregoing transfers shall be held free and clear of the Indenture by the District and it may use and apply such Subordinated Wastewater Revenues for any lawful purpose of the District, including the redemption and purchase of Bonds.

If on any principal payment date, interest payment date or mandatory redemption date the amounts on deposit in the Interest Fund and Principal Fund, including the Sinking Accounts therein are insufficient to make such payments, the Trustee shall immediately notify the District of such deficiency and direct that the District transfer the amount of such deficiency to the Trustee on such payment date. The District covenants and agrees to transfer to the Trustee from any Subordinated Wastewater Revenues in its possession the amount of such deficiency on the principal, interest or mandatory redemption date referenced in such notice.

## **Investments**

All moneys in any of the funds and accounts held by the Trustee shall be invested, as directed by the District, solely in Investment Securities.

The District may and the Trustee shall, upon the Request of the District, enter into a financial futures or financial option contract with an entity the debt securities of which are rated in their respective highest short-term Rating Categories by Moody's and Standard & Poor's.

The District may and the Trustee shall, upon the Request of the District, and provided that the Trustee is supplied with an Opinion of Bond Counsel to the effect that such action is permitted under the laws of the State of California, enter into an interest rate swap agreement corresponding to the interest rate or rates payable on a Series of Bonds or any portion thereof and the amounts received by the District or the Trustee, if any, pursuant to such a swap agreement may be applied to the deposits required hereunder; in which case, the entity with which the District or the Trustee may contract for an interest rate swap is limited to entities the debt securities of which are rated in their respective highest short-term debt Rating Categories by Moody's and Standard & Poor's. If the District so designates, amounts payable under the interest rate swap agreement shall be secured by Subordinated Wastewater Revenues and other assets pledged hereunder to the Bonds on a parity basis therewith and, in such event, the District shall pay to the Trustee for deposit in the Interest Fund, at the times and in the manner provided in the Indenture, the amounts to be paid under such interest rate swap agreement, as if such amounts were additional interest due on the Bonds to which such interest rate swap agreement relates, and the Trustee shall pay to the other party to the interest rate swap agreement, to the extent required thereunder, amounts deposited in the Interest Fund for the payment of interest on the Bonds with respect to which such agreement was entered into.

## **Additional Bonds; Parity Debt**

The issuance of additional Wastewater Bonds was not initially limited by the Indenture. *However, the District has covenanted pursuant to the Twelfth Supplemental Indenture that it will not issue any senior Wastewater Bonds in the future.*

The District may issue Bonds and Parity Debt payable from Subordinated Wastewater Revenues and secured equally and ratably with Bonds previously issued, subject to the following specific conditions precedent to the issuance of any such additional Bonds or Parity Debt:

- (a) No Event of Default shall have occurred and then be continuing.
- (b) The aggregate principal amount of Bonds or Parity Debt shall not exceed any limitation imposed by law or by any Supplemental Indenture.
- (c) The District shall have placed on file with the Trustee a Certificate of the District certifying that the sum of: (1) the Subordinated Wastewater Revenues plus all amounts required

to be paid under the Wastewater Bond Resolution for principal, interest, reserve fund and any other debt service requirements on the Wastewater Bonds for any period of 12 consecutive months during the 18 months immediately preceding the date on which such additional Bonds or Parity Debt will become Outstanding; plus (2) 90% of the amount by which the District projects Subordinated Wastewater Revenues for such period of 12 months would have been increased had increases in rates, fees and charges during such period of 12 months been in effect throughout such period of 12 months; plus (3) 75% of the amount by which the District projects Subordinated Wastewater Revenues will increase during the period of 12 months commencing on the date of issuance of such additional Series of Bonds due to improvements to the Wastewater System under construction (financed from any source) or to be financed with the proceeds of such additional Series of Bonds, shall (4) have been at least equal to 1.1 times the amount of Maximum Annual Debt Service on all Wastewater Bonds, Bonds and Parity Debt then Outstanding and the additional Bonds or Parity Debt then proposed to be issued.

### **Refunding Bonds**

Refunding Bonds may be authorized and issued by the District without compliance with the provisions described above under “Additional Bonds; Parity Debt,” provided that Maximum Annual Debt Service on all Wastewater Bonds, Bonds and Parity Debt Outstanding following the issuance of such refunding Bonds is less than or equal to Maximum Annual Debt Service on all Wastewater Bonds, Bonds and Parity Debt Outstanding prior to the issuance of such refunding Bonds.

### **Covenants**

Among other covenants the District has agreed as follows:

The District will not create any pledge, lien or charge upon any of the Subordinated Wastewater Revenues having priority over or having parity with the lien of the Bonds except only as described above. The District will not amend or change the Wastewater Bond Resolution in any manner which would permit the issuance of additional Wastewater Bonds in a greater principal amount than would have been permitted thereunder prior to such amendment or change or reduce the debt service percentage or coverage requirements contained therein. The District will not issue Wastewater Bonds pursuant to the Wastewater Bond Resolution in such amount as would cause the District to fail to be in compliance with the rate covenant described in the second succeeding paragraph hereof.

The District will not take any action, or fail to take any action, if any such action or failure to take action would adversely affect the exclusion from gross income of the interest on the Bonds under Section 103 of the Code, if applicable. The District will not directly or indirectly use or permit the use of any proceeds of the Bonds or any other funds of the District, or take or omit to take any action that would cause the Bonds to be “arbitrage bonds” within the meaning of Section 148(a) of the Code, if applicable. To that end, the District will comply with all requirements of Section 148 of the Code to the extent applicable to the Bonds.

The District will, at all times while any of the Bonds remain Outstanding, fix, prescribe and collect rates, fees and charges in connection with the services and facilities furnished by the Wastewater System so as to yield Wastewater Revenues in each Fiscal Year sufficient so that the sum of the Subordinated Wastewater Revenues for such year plus all amounts required to be paid under the Wastewater Bond Resolution for such year for principal, interest, reserve fund and any other debt service requirements on the Wastewater Bonds shall be at least equal to 1.1 times the amount of Debt Service on all Wastewater Bonds, Bonds and Parity Debt Outstanding for such Fiscal Year.

The District will maintain and preserve the Wastewater System in good repair and working order at all times, and will operate the Wastewater System in an efficient and economical manner. Subject in each case to the condition that insurance is obtainable at rates deemed reasonable by the District and upon terms and conditions deemed reasonable by the District, the District will procure and maintain at all times: (a) insurance on the Wastewater System against such risks as and in such amounts as the District deems prudent taking into account insurance coverage for similar utilities, and (b) public liability insurance in such amounts as the District deems prudent taking into account insurance coverage for similar utilities.

### **Events of Default; Remedies**

The following events are Events of Default under the Indenture:

(a) default in the due and punctual payment of the principal or Redemption Price of any Bond when and as the same shall become due and payable, whether at maturity as therein expressed, by proceedings for redemption, by declaration or otherwise, or default in the redemption from any Sinking Account of any Bonds in the amounts and at the times provided therefor;

(b) default in the due and punctual payment of any installment of interest on any Bond when and as such interest installment shall become due and payable;

(c) if the District shall fail to observe or perform any covenant, condition, agreement or provision in the Indenture on its part to be observed or performed, other than as referred to in subsection (a) or (b), for a period of sixty (60) days after written notice, specifying such failure and requesting that it be remedied, has been given to the District by the Trustee; except that, if such failure can be remedied but not within such sixty (60) day period and if the District has taken all action reasonably possible to remedy such failure within such sixty (60) day period, such failure shall not become an Event of Default for so long as the District shall diligently proceed to remedy the same in accordance with and subject to any directions or limitations of time established by the Trustee;

(d) if any default shall exist under any agreement governing any Parity Debt and such default shall continue beyond the therein stated grace period, if any, with respect to such default;

(e) if any default shall exist under the Wastewater Bond Resolution and such default shall continue beyond the therein stated grace period, if any, with respect to such default;

(f) if the District files a petition in voluntary bankruptcy, for the composition of its affairs or for its corporate reorganization under any state or Federal bankruptcy or insolvency law, or makes an assignment for the benefit of creditors, or admits in writing to its insolvency or inability to pay debts as they mature, or consents in writing to the appointment of a trustee or receiver for itself;

(g) if a court of competent jurisdiction shall enter an order, judgment or decree declaring the District insolvent, or adjudging it bankrupt, or appointing a trustee or receiver of the District, or approving a petition filed against the District seeking reorganization of the District under any applicable law or statute of the United States of America or any state thereof, and such order, judgment or decree shall not be vacated or set aside or stayed within 60 days from the date of the entry thereof; and

(h) if, under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the District or of the Subordinated Wastewater Revenues, and such custody or control shall not be terminated within 60 days from the date of assumption of such custody or control.

If an Event of Default shall occur and be continuing, the District is to immediately transfer to the Trustee all Subordinated Wastewater Revenues held by it and received thereafter and the Trustee shall apply all Subordinated Wastewater Revenues and any other funds then held or thereafter received by the Trustee under any of the provisions of the Indenture (except as otherwise provided in the Indenture) as follows and in the following order:

(1) To the payment of any expenses necessary in the opinion of the Trustee to protect the interests of the Owners of the Bonds and Parity Debt, including the costs and expenses of the Trustee and the Bondholders in declaring such Event of Default, and payment of reasonable fees and expenses of the Trustee (including reasonable fees and disbursements of its counsel and other agents) incurred in and about the performance of its powers and duties under the Indenture;

(2) To the payment of the whole amount of Bond Obligation then due on the Bonds and Parity Debt (upon presentation of the Bonds and Parity Debt to be paid, and stamping thereon of the payment if only partially paid, or surrender thereof if fully paid) subject to the provisions of the Indenture, with interest on such Bond Obligation, at the rate or rates of interest borne by the respective Bonds and Parity Debt, to the payment to the persons entitled thereto of all installments of interest then due and the unpaid principal or Redemption Price of any Bonds and Parity Debt which shall have become due, whether at maturity or by call for redemption, in the order of their due dates, with interest on the overdue Bond Obligation and Parity Debt at the rate borne by the respective Bonds and Parity Debt, and, if the amount available shall not be sufficient to pay in full all the Bonds and Parity Debt due on any date, together with such interest, then to the payment thereof ratably, according to the amounts of principal or interest or Accreted Value (plus accrued interest) due on such date to the persons entitled thereto, without any discrimination or preference.

In each and every such case during the continuance of such Event of Default, the Owners of not less than a majority in aggregate principal amount of the Bonds at the time Outstanding shall be entitled, upon notice in writing to the District, to declare the principal of all of the Bonds then Outstanding, and the interest accrued thereon, to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable.

This provision, however, is subject to the condition that if, at any time after the principal of the Bonds shall have been so declared due and payable, the District shall pay to or shall deposit with the Trustee a sum sufficient to pay all principal on such Bonds matured prior to such declaration and all matured installments of interest (if any) upon all the Bonds, and the reasonable expenses of the Trustee, and any and all other defaults known to the Trustee (other than in the payment of principal of and interest on the Bonds due and payable solely by reason of such declaration) shall have been made good or cured to the satisfaction of the Trustee, or provision deemed by the Trustee to be adequate shall have been made therefor, then, and in every such case, the Owners of not less than a majority in aggregate principal amount of the Bonds at the time Outstanding, by written notice to the District and to the Trustee, may, on behalf of the Owners of all the Bonds, rescind and annul such declaration and its consequences; but no such rescission and annulment shall extend to or shall affect any subsequent default, or shall impair or exhaust any right or power consequent thereon.

The Trustee is appointed (and the successive respective Owners of the Bonds, by taking and holding the same, shall be conclusively deemed to have so appointed the Trustee) to represent the Owners in the matter of exercising and prosecuting on their behalf such rights and remedies as may be available to such Owners under the provisions of the Bonds, the Indenture, the Act and applicable provisions of any other law. Upon any default or other occasion, giving rise to a right in the Trustee to represent the Bondholders, the Trustee may take such action as may seem appropriate and, upon the request in writing of Owners of not less than twenty-five percent (25%) in aggregate principal amount of Bonds then Outstanding, and upon being indemnified to its satisfaction therefor, shall proceed to protect or enforce its rights or the rights of such Owners by such appropriate actions as it shall deem most effectual to protect and enforce any such right.

No remedy conferred upon or reserved to the Trustee or to the Owners of the Bonds is intended to be exclusive of any other remedy or remedies, and each and every such remedy to the extent permitted by law, shall be cumulative and in addition to any other remedy given under the Indenture or now or hereafter existing at law or in equity or otherwise.

### **Amendments**

The Indenture and the rights and obligations of the District, the Owners of the Bonds and the Trustee may be modified or amended at any time by a Supplemental Indenture, with the written consent of the Owners of a majority in the aggregate amount of Bonds then Outstanding. No such modification or amendment shall (a) extend the fixed maturity of any Bond or reduce the amount of principal thereof, or extend the time of payment or reduce the amount of any Mandatory Sinking Account Payment provided for the payment of any Bonds, or reduce the rate of interest thereon, or extend the time of payment of interest thereon, or reduce any premium payable upon the redemption thereof, without the consent of the Owner of each Bond so affected, or (b) reduce the aforesaid percentage of Bond Obligation the consent of the Owners of which is required to effect any such modification or amendment, or permit the creation of any lien on the Subordinated Wastewater Revenues and other assets pledged under the Indenture, or deprive the Owners of the Bonds of the lien created by the Indenture on such Subordinated Wastewater Revenues and other assets, without the consent of the Owners of all of the Bonds then Outstanding.

The Indenture may also be modified or amended at any time with the written consents of each provider of a letter of credit or a policy of bond insurance for the Bonds, provided that at such time the payment of all the principal of and interest on all Outstanding Bonds shall be insured by a policy or policies of municipal bond insurance or payable under a letter of credit the provider of which shall be a financial institution or association having unsecured debt obligations rated, or insuring or securing other debt obligations rated on the basis of such insurance or letters of credit, rated not lower than the respective ratings on the Bonds by Moody's (if Moody's is then rating the Bonds) or Standard & Poor's (if Standard & Poor's is then rating the Bonds).

The Indenture and the rights and obligations of the District, of the Trustee and the Owners of the Bonds may also be modified or amended at any time by a Supplemental Indenture, without the consent of any Bondholders but only to the extent permitted by law and only for any one or more of the following purposes:

- (1) to add to the covenants and agreements of the District or to surrender any right or power reserved to or conferred upon the District;
- (2) to make such provisions for the purpose of curing any omission or ambiguity, or of curing or correcting any defective provision contained in the Indenture, or in regard to

questions arising under the Indenture, as the District may deem necessary or desirable, and which shall not materially and adversely affect the interests of the Owners of the Bonds;

(3) to modify the Indenture in such manner as to permit qualification under the Trust Indenture Act of 1939, as amended, or any similar federal statute hereafter in effect, and to add such other terms, conditions and provisions as may be permitted by said act or similar federal statutes and which shall not materially and adversely affect the interests of the Owners of the Bonds;

(4) to make modifications or adjustments necessary or desirable to provide for the issuance of Variable Rate Indebtedness, Capital Appreciation Indebtedness or Parity Debt, with such interest rate, payment, maturity and other terms as the District may deem desirable, subject to the provisions of the Indenture;

(5) to provide for the issuance of Bonds in book-entry form or bearer form, provided that such provisions shall not materially and adversely affect the interest of the Owners of the Bonds;

(6) if the District agrees in a Supplemental Indenture to maintain the exclusion of interest on a Series of Bonds from gross income for purposes of federal income taxation, to make such provisions as are necessary or appropriate to ensure such exclusion;

(7) to provide for the issuance of an additional Series of Bonds pursuant to provisions of the Indenture; and

(8) for any other purpose that does not materially and adversely affect the interests of the Owners of the Bonds.

## **Defeasance**

Bonds may be paid by the District in any of the following ways:

(a) by paying or causing to be paid the Bond Obligations of and interest on such Outstanding Bonds, as and when the same become due and payable;

(b) by depositing with the Trustee, an escrow agent or other fiduciary, in trust, at or before maturity, money or securities in the necessary amount to pay or redeem such Outstanding Bonds; or

(c) by delivering to the Trustee, for cancellation by it, such Outstanding Bonds.

Upon the deposit with the Trustee, escrow agent or other fiduciary, in trust, at or before maturity, of money or securities in the necessary amount to pay or redeem any Outstanding Bond (whether upon or prior to its maturity or the redemption date of such Bond), provided that, if such Bond is to be redeemed prior to maturity, notice of such redemption shall have been given or provision satisfactory to the Trustee shall have been made for the giving of such notice, then all liability of the District in respect of such Bond shall cease, terminate and be completely discharged, provided that the Owner thereof shall thereafter be entitled to the payment of the principal of and premium, if any, and interest on the Bonds, and the District shall remain liable for such payment, but only out of such money or securities deposited with the Trustee as aforesaid for their payments.

The District may at any time surrender to the Trustee for cancellation by it any Bonds previously issued and delivered, which the District may have acquired in any manner whatsoever, and such Bonds, upon such surrender and cancellation, shall be deemed to be paid and retired.

Whenever in the Indenture it is provided or permitted that there be deposited with or held in trust by the Trustee money or securities in the necessary amount to pay or redeem any Bonds, the money or securities so to be deposited or held may include money or securities held by the Trustee in the funds and accounts established pursuant to the Indenture and shall be:

(a) lawful money of the United States of America in an amount equal to the principal amount of such Bonds and all unpaid interest thereon to maturity, except that, in the case of Bonds which are to be redeemed prior to maturity and in respect of which notice of such redemption shall have been given or provision satisfactory to the Trustee shall have been made for the giving of such notice, the amount to be deposited or held shall be the principal amount or Redemption Price of such Bonds and all unpaid interest thereon to the redemption date; or

(b) Investment Securities described in clauses (i), (ii) or (v) of the definition thereof, the principal of and interest on which when due will, in the opinion of an independent certified public accountant delivered to the Trustee (upon which opinion the Trustee may conclusively rely), provide money sufficient to pay the principal or Redemption Price of and all unpaid interest to maturity, or to the redemption date, as the case may be, on the Bonds to be paid or redeemed, as such principal or Redemption Price and interest become due, provided that, in the case of Bonds which are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as required by the Indenture or provision satisfactory to the Trustee shall have been made for the giving of such notice; provided, in each case, that the Trustee shall have been irrevocably instructed (by the terms of the Indenture or by Request of the District) to apply such money to the payment of such principal or Redemption Price and interest with respect to such Bonds.

## **APPENDIX D**

### **PROPOSED FORMS OF CO-BOND COUNSEL OPINION AND SPECIAL TAX COUNSEL OPINION**

#### **PROPOSED FORM OF CO-BOND COUNSEL OPINION**

*Upon the delivery of the Series 2017A Bonds, Norton Rose Fulbright US LLP, Los Angeles, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel, propose to render their final approving opinion with respect to the Series 2017A Bonds in substantially the following form:*

[Closing Date]

East Bay Municipal Utility District  
Oakland, California

**\$69,420,000**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
(Alameda and Contra Costa Counties, California)  
WASTEWATER SYSTEM REVENUE/REFUNDING BONDS, SERIES 2017A**

Ladies and Gentlemen:

We have acted as co-bond counsel to the East Bay Municipal Utility District (the “District”) in connection with the issuance of its \$69,420,000 aggregate principal amount of Wastewater System Revenue/Refunding Bonds, Series 2017A (the “Series 2017A Bonds”). The Series 2017A Bonds are being issued pursuant to the Municipal Utility District Act (constituting Division 6 of the Public Utilities Code of the State of California, as amended), the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6 of Division 6 of the Municipal Utility District Act, and with respect to such portion of the Series 2017A Bonds issued to refund outstanding bonds of the District, Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California, as amended (collectively, the “Act”), and a Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, by and between the District and First Interstate Bank of California, which has been succeeded by The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”), as amended and supplemented, including as amended and supplemented by a Nineteenth Supplemental Indenture, dated as of June 1, 2017, providing for the issuance of the Series 2017A Bonds (collectively, the “Indenture”).

In our capacity as co-bond counsel, we have reviewed the Act, the Indenture, certifications of the District, the Trustee, and others, opinions of counsel to the District and the Trustee, and such other documents, opinions and instruments as we deemed necessary to render the opinions set forth herein. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Indenture.

We have assumed the genuineness of all documents and signatures presented to us. We have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture. In addition, we call attention to the fact that the rights and obligations under the Series 2017A Bonds and the Indenture are subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other similar laws affecting

creditors' rights, to the application of equitable principles, to the possible unavailability of specific performance or injunctive relief, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against public agencies in the State of California. Furthermore, the imposition of certain fees and charges by the District relating to the Wastewater System may be subject to the provisions of Articles XIII C and XIII D of the California Constitution.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The Series 2017A Bonds constitute the valid and binding special limited obligations of the District.

2. The Indenture has been duly authorized, executed and delivered by, and constitutes the valid and binding obligation of, the District. The Indenture creates a valid pledge, to secure the payment of the principal of and interest on the Series 2017A Bonds, of the Subordinated Wastewater Revenues of the District, and certain other amounts held by the Trustee under the Indenture, as and to the extent set forth in the Indenture and subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein.

3. The Series 2017A Bonds are special limited obligations of the District and are payable exclusively from and are secured by a pledge of Subordinated Wastewater Revenues of the District and certain other amounts held by the Trustee under the Indenture, as and to the extent set forth in the Indenture and subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein. The general fund of the District is not liable, and neither the credit nor taxing power of the District is pledged, for the payment of the Series 2017A Bonds or the interest thereon.

4. Other bonds and parity debt of the District have been and may from time to time hereafter be issued under the Indenture which are payable from Subordinated Wastewater Revenues on a parity basis with the Series 2017A Bonds.

We express no opinion as to any federal, state or local tax consequences of the ownership or disposition of the Series 2017A Bonds or the receipt of interest thereon.

Our opinions are based on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may hereafter come to our attention or to reflect any changes in any law that may hereafter occur or become effective. Moreover, our opinions are not a guarantee of result and represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

No opinion is expressed herein on the accuracy, completeness or sufficiency of the Official Statement or other offering material relating to the Series 2017A Bonds.

Respectfully submitted,

Respectfully submitted,

## PROPOSED FORM OF OPINION OF SPECIAL TAX COUNSEL

*Upon the delivery of the Series 2017A Bonds, Orrick, Herrington & Sutcliffe LLP, Special Tax Counsel to the Initial Purchaser, proposes to render its tax opinion with respect to the Series 2017A Bonds in substantially the following form:*

[Closing Date]

East Bay Municipal Utility District  
Oakland, California

East Bay Municipal Utility District  
Wastewater System Revenue/Refunding Bonds, Series 2017A  
(Special Tax Opinion)

Ladies and Gentlemen:

We have acted as special tax counsel in connection with the issuance by the East Bay Municipal Utility District (the “District”) of \$69,420,000 aggregate principal amount of Wastewater System Revenue/Refunding Bonds, Series 2017A (collectively, the “Bonds”). The Bonds are being issued pursuant to a Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, as supplemented by supplemental indentures, including a Nineteenth Supplemental Indenture, dated as of June 1, 2017 (collectively, the “Indenture”), between the District and First Interstate Bank of California, which has been succeeded by The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”). Capitalized terms not otherwise defined herein shall have the meanings set forth in the Indenture.

In such connection, we have reviewed the Indenture, the Tax Certificate of the District, dated the date hereof and relating to the Bonds (the “Tax Certificate”), opinions of counsel to the Trustee and the District, certificates of the District, the Trustee and others, and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein. In particular, we have relied on the opinion of Norton Rose Fulbright US LLP and Curls Bartling P.C., co-bond counsel to the District (the “Bond Counsel Opinion”), regarding, among other matters, the validity of the Bonds. In rendering the opinions expressed herein, we expressly have relied on the Bond Counsel Opinion that, among other matters, the Bonds are valid and binding obligations of the District. We call attention to the fact that the interest on the Bonds may not be excluded from gross income for federal income tax purposes or exempt from State of California personal income taxes if the Bonds are not valid, binding and enforceable in accordance with their terms.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the date hereof. Accordingly, this opinion is not intended to, and may not, be relied upon in connection with any such actions, events or matters. Our engagement with respect to the Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or copies) and the due and legal execution thereof by, and validity against, all parties. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or

certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause the interest on the Bonds to be included in gross income for federal income tax purposes. We call attention to the fact that the rights and obligations under the Bonds, the Indenture and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. Our advice did not include financial advice or non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the Bonds and express no opinion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although we observe that it is included in adjusted current earnings when calculating corporate alternative minimum taxable income. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of such interest on, the Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

## APPENDIX E

### DTC AND THE BOOK-ENTRY ONLY SYSTEM

The information in this Appendix E concerning The Depository Trust Company, New York, New York (“DTC”), and DTC’s book-entry system has been obtained from DTC and the District and the Trustee take no responsibility for the completeness or accuracy thereof. The District and the Trustee cannot and do not give any assurances that DTC, Direct Participants (as defined below) or Indirect Participants (as defined below) will distribute to the Beneficial Owners (a) payments of interest, principal or premium, if any, with respect to the Series 2017A Bonds, (b) certificates representing ownership interest in or other confirmation of ownership interest in the Series 2017A Bonds, or (c) redemption or other notices sent to DTC or Cede & Co., its nominee, as the registered owner of the Series 2017A Bonds, or that they will do so on a timely basis, or that DTC, Direct Participants or Indirect Participants will act in the manner described in this Appendix E. The District and the Trustee are not responsible or liable for the failure of DTC or any DTC Direct or Indirect Participant to make any payment or give any notice to a Beneficial Owner with respect to the Series 2017A Bonds or an error or delay relating thereto. The current “Rules” applicable to DTC are on file with the Securities and Exchange Commission and the current “Procedures” of DTC to be followed in dealing with DTC’s Direct and Indirect Participants are on file with DTC.

DTC will act as securities depository for the Series 2017A Bonds. The Series 2017A 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 certificate will be issued for each maturity of the Series 2017A Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest securities 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 provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 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 book-entry 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 is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. 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”). DTC has a Standard & Poor’s rating of AA+. The DTC Rules applicable to Direct and Indirect Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com). The information on such website is not incorporated herein by reference.

Purchases of Series 2017A Bonds under the DTC book-entry system must be made by or through Direct Participants, which will receive a credit for the Series 2017A Bonds on DTC’s records. The

ownership interest of each actual purchaser of each Series 2017A Bond (“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 2017A 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 2017A Bonds, except in the event that use of the book-entry system for the Series 2017A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2017A 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 the Series 2017A 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 2017A Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series 2017A 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. Beneficial Owners of the Series 2017A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2017A Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Series 2017A Bond documents. For example, Beneficial Owners of the Series 2017A Bonds may wish to ascertain that the nominee holding the Series 2017A Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2017A Bonds are being redeemed, DTC’s practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2017A Bonds unless authorized by a Direct Participant in accordance with DTC’s MMI 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 2017A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal of, premium, if any, and interest on the Series 2017A 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 or the Trustee, on the payable date in accordance with their respective holdings shown on DTC’s records. Payments by Direct or Indirect 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, the Trustee, or the District, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal of, premium, if any, and interest on the Series 2017A Bonds to Cede & Co. (or such other nominee as may be requested by an

authorized representative of DTC) is the responsibility of the District or the Trustee, 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.

DTC may discontinue providing its services as securities depository with respect to the Series 2017A Bonds at any time by giving notice to the Trustee and the District. Under certain circumstances, in the event that a successor depository is not obtained, Series 2017A Bond certificates are required to be printed and delivered.

The District may decide to discontinue use of the system of book-entry transfers for the Series 2017A Bonds through DTC (or a successor securities depository). In that event, Series 2017A Bond certificates will be printed and delivered as provided in the Indenture. In addition, the following provisions would apply: the principal or redemption price of the Series 2017A Bonds will be payable upon presentation thereof, at the principal corporate trust office of the Trustee, in San Francisco, California; interest on the Series 2017A Bonds will be payable by check mailed on each interest payment date to the registered owners thereof as shown on the registration books of the Trustee as of the close of business on the 15<sup>th</sup> day of the calendar month immediately preceding the applicable interest payment date (the “record date”), except that in the case of an owner of \$1,000,000 or more in aggregate principal amount of Series 2017A Bonds, upon written request of such owner to the Trustee received at least 10 days prior to the record date for the payment of interest, specifying the account or accounts to which such payment shall be made (which request shall remain in effect until revoked by such owner in a subsequent writing delivered to the Trustee), such interest shall be paid in immediately available funds by wire transfer to such account or accounts on the following interest payment date; and the Series 2017A Bonds will be transferable and exchangeable on the terms and conditions provided in the Indenture.

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

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## APPENDIX F

### FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (this “Disclosure Agreement”), dated June 14, 2017, is executed and delivered by the East Bay Municipal Utility District (the “District”) and The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “Trustee”) in connection with the issuance of \$69,420,000 aggregate principal amount of Wastewater System Revenue/Refunding Bonds, Series 2017A (the “Bonds”). The Bonds are being issued pursuant to a Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, by and between the District and the Trustee, as amended and supplemented, including as amended and supplemented by the Nineteenth Supplemental Indenture, dated as of June 1, 2017, providing for the issuance of the Bonds (collectively, the “Indenture”). In connection therewith the District and the Trustee covenant and agree as follows:

Section 1. Purpose of this Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the District and the Trustee for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriter (as defined herein) in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

Section 2. Definitions. In addition to the definitions set forth above and in the Indenture, 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.

“Beneficial Owner” shall mean any person who (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries); or (b) is treated as the owner of any Bonds for federal income tax purposes.

“Disclosure Representative” shall mean the Director of Finance or the Treasury Manager of the District or a designee of the Director of Finance, or such other officer or employee as the District shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean the Trustee, 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 Trustee a written acceptance of such designation.

“Holder” shall mean either the registered owners of the Bonds or, if the Bonds are registered in the name of The Depository Trust Company or another recognized depository, any applicable participant in such depository system.

“Listed Event” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934 or any other entity designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at <http://emma.msrb.org>.

“Official Statement” shall mean the Official Statement for the Bonds dated June 1, 2017, as it may be updated prior to the delivery of the Bonds.

“Participating Underwriter” shall mean the initial purchaser of the Bonds listed on the cover page of the Official Statement required to comply with the Rule in connection with offering of the Bonds.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the SEC under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“SEC” shall mean the United States Securities and Exchange Commission.

Section 3. Provision of Annual Reports.

(a) The District shall, or shall cause the Dissemination Agent to, not later than December 31 of each year in which the Bonds are outstanding, commencing with the report for the 2016-17 Fiscal Year (which is due not later than December 31, 2017), provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report must be submitted in electronic format, accompanied by such identifying information as prescribed by the MSRB. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Agreement; *provided* that if the audited financial statements of the District are not available by the date required above for the filing of the Annual Report, the District shall submit the audited financial statements as soon thereafter as available. If the District’s Fiscal Year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(c).

(b) If the District is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the District shall send to the MSRB, in a timely manner, on or before such date a notice in substantially the form attached hereto as Exhibit A.

(c) The Dissemination Agent shall:

- (i) determine the electronic filing address of, and then-current procedures for submitting Annual Reports to, the MSRB each year prior to the date for providing the Annual Report; and
- (ii) file a report with the District and (if the Dissemination Agent is not the Trustee, the Trustee) certifying that the Annual Report has been provided to the MSRB pursuant to this Disclosure Agreement, and stating the date it was provided.

Section 4. Content of Annual Reports. The District’s Annual Report shall contain or include by reference the following categories or similar categories of information updated to incorporate information for the most recent fiscal or calendar year, as applicable (the tables referred to below are those appearing in the Official Statement relating to the Bonds):

(a) The audited financial statements of the District for the prior Fiscal Year, prepared in accordance with Generally Accepted Accounting Principles, as promulgated, to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the District’s audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available;

- (b) A table showing the Wastewater System sources of funds;
- (c) A table showing Wastewater System rates and charges for the preceding Fiscal Year;
- (d) A table showing average daily wastewater flows of the Wastewater System for the preceding Fiscal Year;
- (e) A table showing outstanding Wastewater System debt as of the preceding Fiscal Year; and
- (f) A table showing Wastewater System revenues, operating and maintenance costs, debt service on Wastewater System revenue bonds and debt service coverage for the Wastewater System revenue bonds for the most recent Fiscal Year.

Financial and operating information relating to the District referenced in items 3(b)-(f) above may be updated from time to time, and such updates may involve displaying data in a different format or table or eliminating data that is no longer material.

Any or all of the items listed above may also be included by specific reference to other documents, including official statements of debt issues of the District or related public entities, which have been submitted to the MSRB or the SEC. If any document included by reference is a final official statement, it must be available from the MSRB. The District shall clearly identify each such other document so included by reference.

#### Section 5. Reporting of Significant Events.

(a) Pursuant to the provisions of this section, upon the occurrence of any of the following events (in each case to the extent applicable) with respect to the Bonds, the District shall give, or cause to be given by so notifying the Dissemination Agent in writing and instructing the Dissemination Agent to give, notice of the occurrence of such event, in each case, pursuant to Section 5(c) hereof:

- 1. principal or interest payment delinquencies;
- 2. non-payment related defaults, if material;
- 3. modifications to the rights of the Bondholders, if material;
- 4. optional, contingent or unscheduled calls, if material, and tender offers;
- 5. defeasances;
- 6. rating changes;
- 7. adverse tax opinions or 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 Bonds or other material events affecting the tax status of the Bonds;
- 8. unscheduled draws on the debt service reserves reflecting financial difficulties;
- 9. unscheduled draws on the credit enhancements reflecting financial difficulties;

10. substitution of the credit or liquidity providers or their failure to perform;
11. release, substitution or sale of property securing repayment of the Bonds, if material;
12. bankruptcy, insolvency, receivership or similar proceedings of the District, which shall occur as described below;
13. appointment of a successor or additional trustee or the change of name of a trustee, if material, or;
14. the consummation of a merger, consolidation, or acquisition involving the District or the sale of all or substantially all of the assets of the Wastewater System 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.

For these purposes, any event described in item 12 of this Section 5(a) is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the District in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the District, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the District.

(b) Upon receipt of notice from the District and instruction by the District to report the occurrence of any Listed Event, the Dissemination Agent shall provide notice thereof to the MSRB in accordance with Section 5(c) hereof. In the event the Dissemination Agent shall obtain actual knowledge of the occurrence of any of the Listed Events, the Dissemination Agent shall, immediately after obtaining such knowledge, contact the Disclosure Representative, inform such person of the event, and request that the District promptly notify the Dissemination Agent in writing whether or not to report the event pursuant to Section 5(c). For purposes of this Disclosure Agreement, “actual knowledge” of the occurrence of such Listed Event shall mean actual knowledge by the Dissemination Agent, if other than the Trustee, and if the Dissemination Agent is the Trustee, then by the officer at the corporate trust office of the Trustee with regular responsibility for the administration of matters related to the Indenture. The Dissemination Agent shall have no responsibility to determine the materiality, if applicable, of any of the Listed Events.

(c) The District, or the Dissemination Agent, if the Dissemination Agent has been instructed by the District to report the occurrence of a Listed Event, shall file a notice of such occurrence with the MSRB in a timely manner not more than ten (10) business days after the occurrence of the event.

Section 6. Termination of Reporting Obligation. The District’s obligations under this Disclosure Agreement shall terminate with respect to all Bonds upon the maturity, defeasance, prior redemption, acceleration or payment in full of all of such Bonds and with respect to any Bond upon the maturity, defeasance, prior redemption or payment in full of such Bond.

Section 7. Dissemination Agent. 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 Trustee, upon notice from the District, shall be the Dissemination Agent. The initial Dissemination Agent shall be the Trustee. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the District pursuant to this Disclosure Agreement. The Dissemination Agent shall receive compensation for the services provided pursuant to this Disclosure Agreement.

Section 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the District and the Dissemination Agent may amend this Disclosure Agreement (and, to the extent that any such amendment does not materially change or increase its obligations hereunder, the Dissemination Agent shall agree to any amendment so requested by the District), and any provision of this Disclosure Agreement may be waived; *provided*, that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Section 3(a), Section 4 or Section 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the District shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the District. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given in the same manner as for a Listed Event under Section 5(c), and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Section 9. Filings with the MSRB. All information, operating data, financial statements, notices and other documents provided to the MSRB in accordance with this Disclosure Agreement shall be provided in an electronic format prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

Section 10. Additional Information. 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 11. Default. In the event of a failure of the District or the Dissemination Agent to comply with any provision of this Disclosure Agreement, the Trustee may (and, at the request of any Participating Underwriter or the Holders of at least 25% of the aggregate principal amount of Outstanding Bonds and upon provision of indemnification satisfactory to the Trustee, shall), or any Holder or Beneficial Owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Indenture, and the sole remedy under this Disclosure Agreement in the event of any failure of the District or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance hereunder.

Section 12. Duties, Immunities and Liabilities of Trustee and Dissemination Agent. Article VIII of the Indenture is hereby made applicable to this Disclosure Agreement as if the Disclosure Agreement were (solely for this purpose) contained in the Indenture. The Dissemination Agent shall be entitled to the protections and limitations on liability afforded to the Trustee thereunder. The Dissemination Agent (if other than the Trustee in its capacity as Dissemination Agent) shall have only such duties as are specifically set forth in this Disclosure Agreement, and the District agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys fees) of defending against any claim of liability, but excluding any loss, expense and liabilities due to the Dissemination Agent's negligence or willful misconduct. The obligations of the District under this Section 12 shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 13. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the District:

East Bay Municipal Utility District  
375 Eleventh Street, MS 801  
Oakland, California 94607-4240  
Attention: Debt Administrator  
Phone: 510-287-0441  
Fax: 510-287-0293

To the Dissemination Agent:

The Bank of New York Mellon  
Trust Company, N.A.  
100 Pine Street, Suite 3150  
San Francisco, California 94111  
Phone: 415-263-2420  
Fax: 415-399-1647

Section 14. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the District, the Trustee, the Dissemination Agent, the Participating Underwriters and the Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Section 15. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN WITNESS WHEREOF, this Disclosure Agreement has been executed on behalf of the District and the Trustee by their duly authorized representatives.

Dated: June 14, 2017

EAST BAY MUNICIPAL UTILITY DISTRICT

By: \_\_\_\_\_  
Sophia D. Skoda  
Director of Finance

Dated: June 14, 2017

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

By: \_\_\_\_\_  
Vice President

EXHIBIT A

**NOTICE TO MSRB OF FAILURE TO FILE ANNUAL REPORT**

Name of Issuer: EAST BAY MUNICIPAL UTILITY DISTRICT

Name of Bond Issue: \$69,420,000 Wastewater System Revenue/Refunding Bonds, Series 2017A

Date of Issuance: June 14, 2017

NOTICE IS HEREBY GIVEN that the East Bay Municipal Utility District (the "District") has not provided an Annual Report with respect to the above-named Bonds as required by Section 3(a) of the Continuing Disclosure Agreement, dated June 14, 2017, by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee") and in accordance with Section 35.14 of the Nineteenth Supplemental Indenture, dated as of June 1, 2017, by and between the District and the Trustee, supplementing the Wastewater System Subordinated Revenue Bond Indenture, dated as of April 1, 1990, as supplemented and amended, by and between the District and the Trustee, providing for the issuance of the Bonds. The District anticipates that the Annual Report will be filed by \_\_\_\_\_, 20\_\_.

Dated: \_\_\_\_\_, 20\_\_

THE BANK OF NEW YORK MELLON  
TRUST COMPANY, N.A.,  
as Trustee on behalf of the District

By: \_\_\_\_\_  
Authorized Officer

cc: East Bay Municipal Utility District



