#### PRELIMINARY OFFICIAL STATEMENT DATED MAY 11, 2012

Ratings: S&P: "AA-" Moody's: "Aa3" (see "RATINGS")

In the opinion of Sidley Austin LLP, San Francisco, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel, based on existing statutes, regulations, rulings and judicial decisions, and assuming compliance with certain covenants in the documents pertaining to the Bonds and requirements of the Internal Revenue Code of 1986 (the "Code"), as amended, as described herein, interest on the 2012 Series ABC Bonds is not includable in the gross income of the owners of such Bonds for federal income tax purposes. In the further opinion of Co-Bond Counsel, interest on the 2012 Series ABC Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals and corporations. Interest on the 2012 Series ABC Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may therefore affect a corporation's alternative minimum tax liability. In the further opinion of Co-Bond Counsel, seempt from personal income taxes imposed by the State of California. Co-Bond Counsel express no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the 2012 Series ABC Bonds. See "TAX MATTERS."



\$686,040,000\* Public Utilities Commission of the City and County of San Francisco San Francisco Water Revenue Bonds, 2012 Series ABC

\$575,710,000\* 2012 Sub-Series A Bonds (WSIP) \$16,150,000\* 2012 Sub-Series B Bonds (Prop. A Reimbursement)

#### \$94,180,000\* 2012 Sub-Series C Bonds (Refunding)

#### **Dated: Date of Delivery**

Due: November 1, as shown on inside front cover

General. This cover page contains certain information for quick reference only. It is not intended to be a summary of the security or terms of the water revenue bonds captioned above (the "2012 Sub-Series A Bonds," "2012 Sub-Series B Bonds," the "2012 Sub-Series C Bonds," each being referred to as a "Sub-series" and, collectively, as the "2012 Series ABC Bonds"). Investors are instructed to read the entire Official Statement to obtain information essential to making an informed investment decision.

Authority for Issuance. The Public Utilities Commission of the City and County of San Francisco (the "SFPUC") is issuing the 2012 Series ABC Bonds pursuant to authority granted by the Charter of the City and County of San Francisco (the "City"), through Proposition A, approved by the voters of the City on November 5, 2002, and Proposition E, approved by the voters of the City on November 5, 2002. Each Sub-series will be issued under a separate Supplemental Indenture, each dated as of June 1, 2012, by and between the SFPUC and U.S. Bank National Association, as trustee (the "Trustee"), and each of which supplements the Amended and Restated Indenture, dated as of August 1, 2002, by and between the SFPUC and the Trustee (as supplemented and amended to date, the "Indenture"). See "SECURITY FOR THE BONDS."

*Purposes.* The 2012 Sub-Series A Bonds are being issued primarily to finance a portion of the design, acquisition and construction of various capital projects of benefit to the SFPUC's Water Enterprise. Proceeds of the 2012 Sub-Series A Bonds will also be applied to fund capitalized interest on that Sub-series of Bonds for a limited period. The 2012 Sub-Series B Bonds are being issued primarily to reimburse the Commission for costs to settle litigation arising out of certain capital projects of benefit to the SFPUC's Water Enterprise. The 2012 Sub-Series C Bonds are being issued to refund and defease certain outstanding water revenue bond issues of the SFPUC captioned "San Francisco Water Revenue Bonds, 2001 Series A" and "San Francisco Water Revenue Bonds, 2002 Series A." Proceeds of the 2012 Series ABC Bonds will also be applied to fund a combined debt service reserve account for the 2012 Series ABC Bonds, and to pay the costs of issuance of the 2012 Series ABC Bonds. See "PLAN OF FINANCE."

*Denominations and Interest.* The 2012 Series ABC Bonds will be available in the denominations of \$5,000 or any integral multiple thereof and will mature in the years and amounts and accrue interest from their date of delivery at the rates set forth on the inside cover page of this Official Statement. Interest on the 2012 Series ABC Bonds is payable semiannually on May 1 and November 1 of each year, commencing November 1, 2012. See "THE 2012 SERIES ABC BONDS."

**Book-Entry Only.** The 2012 Series ABC Bonds will be issued as fully registered bonds, registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), and will be available to ultimate purchasers (the "Beneficial Owners"), under the book-entry system maintained by DTC. Beneficial Owners will not receive physical certificates representing their interests in the 2012 Series ABC Bonds. The principal of, premium, if any, and interest on the 2012 Series ABC Bonds are payable to DTC by the Trustee, and, so long as DTC is acting as securities depository for the 2012 Series ABC Bonds, disbursements of such payments to DTC Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC Participants. See "THE 2012 SERIES ABC BONDS."

*Redemption.* The 2012 Series ABC Bonds are subject to optional redemption and mandatory sinking fund redemption prior to maturity. See "THE 2012 SERIES ABC BONDS."

Security. Under the Indenture, the SFPUC has irrevocably pledged the Revenues of its Water Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of all outstanding parity revenue bonds issued under the Indenture, including the 2012 Series ABC Bonds, subject to the allocation of funds provided in the Indenture. The 2012 Series ABC Bonds are payable on a parity with certain Outstanding Bonds previously issued by the SFPUC under the Indenture. See "SECURITY FOR THE BONDS."

*Limited Obligation.* The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the 2012 Series ABC Bonds from any source of funds other than Revenues. The SFPUC has no taxing power. The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds. The 2012 Series ABC Bonds are not secured by a legal or equitable pledge of, or charge, lien, or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except Revenues. See "SECURITY FOR THE BONDS."

MATURITY SCHEDULE

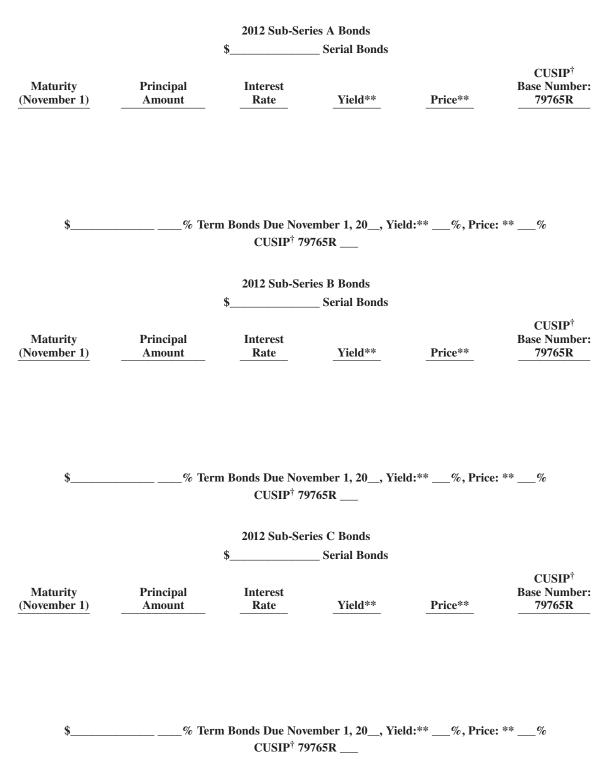
(See inside cover)

The 2012 Series ABC Bonds are scheduled to be sold through respective competitive sales to be held on May 22, 2012.

The 2012 Series ABC Bonds are offered when, as and if issued by the SFPUC and received by the successful bidder, subject to the approval of validity by Sidley Austin LLP, San Francisco, California, and Curls Bartling PC., Oakland, California, Co-Bond Counsel to the SFPUC, and to certain other conditions. Certain matters will be passed upon for the SFPUC and the City by Jones Hall, A Professional Law Corporation, San Francisco, California, Disclosure Counsel, and by the City Attorney of the City and County of San Francisco. Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCarley Berry & Co., LLC, San Francisco, California, Co-Financial Advisors to the SFPUC, assisted in the structuring of this financing. It is expected that the 2012 Series ABC Bonds in fully registered form will be available for delivery in book-entry form in New York, New York, on or about June 7, 2012.

The date of this Official Statement is \_\_\_\_\_, 2012.

#### **MATURITY SCHEDULE\***



<sup>\*</sup> Preliminary; subject to change.

<sup>\*\*</sup> Reoffering prices and yields have been provided by the respective underwriters. See "UNDERWRITING."

<sup>&</sup>lt;sup>†</sup> Copyright 2012, American Bankers Association. CÚSIP data herein is provided by Standard & Poor's CUSIP Service Bureau, a division of The McGraw-Hill Companies, Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Service. CUSIP numbers are provided for convenience of reference only. Neither the SFPUC nor the Underwriters take any responsibility for the accuracy of such CUSIP numbers.

## **OFFICIAL NOTICE OF SALE**

### \$575,710,000<sup>\*</sup> PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES A (WSIP)

NOTICE IS HEREBY GIVEN that proposals will be received in electronic form only and solely through BiDCOMP<sup>TM</sup>/Parity<sup>®</sup> ("Parity"), in the manner described below, by the Public Utilities Commission of the City and County of San Francisco (the "Commission"), at the offices of the Commission on:

### May 22, 2012, at 8:00 a.m. (California time)

(subject to postponement or cancellation in accordance with this Official Notice of Sale)

for the purchase of the revenue bonds captioned above (the "Bonds") of the Commission more particularly described below. See "TERMS OF SALE – *Warning Regarding Electronic Bids.*"

The Commission reserves the right to postpone, from time to time, the date established for receipt and opening of bids with respect to the Bonds. Notice of any postponement will be communicated through Parity as soon as practicable following postponement. See "TERMS OF SALE – *Postponement or Cancellation of Sale*."

The Commission reserves the right to cancel the sale of the Bonds. Notice of cancellation will be given through Parity as soon as practicable following such cancellation. See "TERMS OF SALE –*Postponement or Cancellation of Sale*."

Notice of any change in the terms of the sale of the Bonds will be given through Parity by 4:00 p.m. California time the day before the sale. See "TERMS RELATING TO THE BONDS – *Adjustment of Principal Payments*" and "TERMS OF SALE – *Right to Modify or Amend*." As an accommodation to bidders, telephone, facsimile or electronic notice of any amendment or modification of this Official Notice of Sale will be given to any bidder requesting such notice from either of the Commission's financial advisors (the "Financial Advisors"):

Montague DeRose and Associates, LLC 2175 N. California Boulevard, Suite 745 Walnut Creek, California 94596 Attention: Chia Yang	Backstrom McCarley Berry & Co., LLC 115 Sansome Street, Mezzanine A San Francisco, California 94104 Attention: Vincent McCarley
Telephone: (925) 212-4889	Telephone: (415) 392-5505
Facsimile: (925) 256-9795	Facsimile: (415) 392-5276
E-mail: yang@montaguederose.com	E-mail: vmccarley@bmcbco.com

<sup>\*</sup> Subject to adjustment in accordance with this Official Notice of Sale.

Failure of any bidder to receive any such supplemental notice shall not affect the sufficiency of any required notice or the legality of the sale.

Bidders are directed to the Preliminary Official Statement of the Commission dated the date hereof with respect to the Bonds (the "Preliminary Official Statement") for additional information regarding the Commission, the Water Enterprise (as defined in the Preliminary Official Statement), the City and County of San Francisco (the "City"), the Bonds and the security therefor, and other matters. See "TERMS OF SALE – *Official Statement*" below.

This Official Notice of Sale will be submitted to Ipreo Prospectus ("Ipreo") for posting on its website (www.i-dealprospectus.com) and in the Parity bid delivery system. If any summary of the terms of the sale of the Bonds posted by Ipreo or Parity conflicts with this Official Notice of Sale in any respect, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

#### **TERMS RELATING TO THE BONDS**

THE AUTHORITY FOR ISSUANCE, PURPOSE, PRINCIPAL AND INTEREST REPAYMENT, SECURITY AND SOURCES OF PAYMENT, THE LEGAL OPINION AND ALL OTHER INFORMATION REGARDING THE BONDS ARE PRESENTED IN THE PRELIMINARY OFFICIAL STATEMENT, DATED MAY 10, 2012 (THE "PRELIMINARY OFFICIAL STATEMENT") WHICH EACH BIDDER IS DEEMED TO HAVE OBTAINED AND REVIEWED PRIOR TO BIDDING FOR THE BONDS. THIS OFFICIAL NOTICE OF SALE GOVERNS ONLY THE TERMS OF SALE, BIDDING, AWARD AND CLOSING PROCEDURES FOR THE BONDS. THE DESCRIPTION OF THE BONDS CONTAINED IN THIS OFFICIAL NOTICE OF SALE IS QUALIFIED IN ALL RESPECTS BY THE DESCRIPTION CONTAINED IN THE PRELIMINARY OFFICIAL STATEMENT.

Subject to the foregoing, the Bonds are generally described as follows:

*Authority for the Bonds*. The Commission is issuing the Bonds under the Charter of the City and under an Amended and Restated Indenture, dated as of August 1, 2002 (the "Original Indenture"), by and between the Commission and U.S. Bank National Association, as trustee (the "Trustee"), as amended and supplemented, and as further supplemented by a Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture"), by and between the Trustee and the Commission, a Seventeenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Eighteenth Supplemental Indenture"), by and between the Trustee and the Commission, as amended and supplemental Indenture.

The purchaser of the Bonds is deemed to consent to certain amendments contained in the Fifth Supplemental Indenture by and between the Trustee and the Commission, dated as of June 1, 2010. See "INTRODUCTION – Amendments Effected by Fifth Supplemental Indenture" in the Preliminary Official Statement.

*Issue*. The Bonds are fully registered bonds without coupons in book-entry form in denominations of \$5,000 or any integral multiple thereof, as designated by the successful bidder thereof (the "Purchaser"), all dated the date of their original issuance. Potential bidders will be notified via Parity, not later than 4:00 p.m. (California time) on the business day prior to the

time prescribed for the receipt of bids, of any change to the principal payment schedule for the Bonds to be used for the bidding process. In addition, the Commission reserves the right, following the determination of the best bid for the Bonds, to adjust the actual principal payment schedule. See "TERMS RELATING TO THE BONDS – *Principal Payments*" and "– *Adjustment of Principal Payments*" below.

*Interest Rates.* Interest on the Bonds will be payable semiannually on May 1 and November 1 of each year, commencing November 1, 2012 (each, an "Interest Payment Date"). Interest on the Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day consecutive months.

Bidders must specify the rate or rates of interest which the Bonds for which they are bidding will bear; provided, that the following limitations apply:

(i) the maximum interest rate bid may not exceed 12% per annum;

(ii) each interest rate specified in any bid must be a multiple of 1/8 or 1/20 of 1% per annum and a zero rate of interest cannot be named;

(iii) each Bond shall bear interest from its date to its stated maturity date at the single rate of interest specified in the bid; and

(iv) all Bonds of a sub-series maturing at any one time shall bear the same rate of interest.

**Premium and Discount**. No bid offering to pay an amount less than 106 percent or more than 114 percent of the par value of the Bonds will be considered. Each maturity of the Bonds must be reoffered at a yield that will produce a price of not less than 98 percent.

**Principal Payments.** The Bonds maturing on November 1 in any or all years 2031 through 2042, both inclusive, shall be serial and/or term bonds, as specified by each bidder. The principal amount of Bonds maturing or subject to mandatory sinking fund redemption in any year shall be in integral multiples of \$5,000. For any term Bonds specified, the principal amount for a given year may be allocated only to a single term bond and must be part of an uninterrupted annual sequence from the first mandatory sinking fund payment to the term bond maturity.

An estimate of the principal payment schedule for the Bonds is set forth below.

Date (November 1)	Principal Payment <sup>*</sup>
2031	\$15,595,000
2032	25,200,000
2033	37,345,000
2034	39,290,000
2035	41,210,000
2036	43,440,000
2037	54,960,000
2038	57,775,000
2039	60,740,000
2040	63,855,000

Date	Principal
(November 1)	Payment*
2041	66,785,000
2042	69,515,000
	\$575,710,000

\* Preliminary, subject to change.

Information related to the principal payment schedule of the Bonds will be updated on Parity one day prior to the sale of the Bonds. See "*Adjustment of Principal Payments*" below.

Adjustment of Principal Payments. The principal payment amounts set forth in this Official Notice of Sale reflect certain estimates of the Commission with respect to the likely interest rates of the winning bid and the premium contained in the winning bid. Potential bidders will be notified via Parity not later than 4:00 p.m. (California time) on the business day preceding the date then prescribed for the receipt of bids of any change to the principal payment schedule for the Bonds to be utilized for the bidding process. The Commission reserves the right to change the principal payment schedule set forth in this Official Notice of Sale for the Bonds after the determination of the winning bidder for the Bonds, by adjusting one or more principal payments of the Bonds in increments of \$5,000 by not more than 10% for any maturity in order to achieve its financing objectives; provided, however, that the aggregate principal amount of the Bonds shall not exceed \$633,280,000.\*

NO PURCHASER MAY WITHDRAW ANY BID OR CHANGE THE INTEREST RATES BID OR THE REOFFERING PRICES IN ITS REOFFERING PRICE CERTIFICATE AS A RESULT OF ANY CHANGE MADE TO THE PRINCIPAL PAYMENTS OF THE BONDS IN ACCORDANCE WITH THIS OFFICIAL NOTICE OF SALE. FURTHER, IF THE COMMISSION CHANGES THE PRINCIPAL PAYMENT SCHEDULE FOR THE BONDS AFTER THE RECEIPT OF BIDS, THE UNDERWRITER'S DISCOUNT, EXPRESSED IN DOLLARS PER THOUSAND DOLLAR OF BONDS, WILL BE HELD CONSTANT. THE COMMISSION WILL NOT BE RESPONSIBLE, IF AND TO THE EXTENT THAT, ANY ADJUSTMENT AFFECTS (i) THE NET COMPENSATION TO BE REALIZED BY THE PURCHASER OR (ii) THE TRUE INTEREST COST OF THE WINNING BID OR THE RANKING OF ANY BID RELATIVE TO OTHER BIDS.

**Redemption.**<sup>\*</sup> The Bonds maturing on or after November 1, 2022 shall be subject to redemption prior to their stated maturity, at the option of the Commission, from and to the extent of any source of available funds, as a whole or in part, on any date on or after May 1, 2022, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Tax Matters and Legal Opinions.* Upon delivery of the Bonds, Co-Bond Counsel, Sidley Austin LLP and Curls Bartling P.C., will deliver to the Commission opinions to the effect that based on existing statutes, regulations, rulings and judicial decisions and assuming compliance with certain covenants in the documents pertaining to the Bonds and requirements of the Internal Revenue Code

<sup>\*</sup> Preliminary, subject to change. If revisions are made to the principal amortization schedule prior to the sale date, the not to exceed amount will be equal to 110% of the revised aggregate principal amount of the Bonds.

of 1986, as amended, interest on the Bonds is not includable in the gross income of the owners of the Bonds for federal income tax purposes. In the further opinions of Co-Bond Counsel, interest on the Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals and corporations. Interest on the Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may, therefore, affect a corporation's alternative minimum tax liability. In the further opinions of Co-Bond Counsel, interest on the Bonds is exempt from personal income taxes imposed by the State of California. See "TAX MATTERS" in the Preliminary Official Statement.

A complete copy of the proposed form of opinions of Co-Bond Counsel is set forth in Appendix F to the Preliminary Official Statement. A copy of the approving legal opinions of Sidley Austin LLP and Curls Bartling P.C., Co-Bond Counsel with respect to the Bonds, will be furnished to the Purchaser upon delivery of the Bonds. Copies of said opinions will be filed with the Depository Trust Company ("DTC") and with the City Treasurer.

### TERMS OF SALE

*Single Bid for the Bonds*. Each bid for the Bonds must be for all, and not less than all, of the Bonds hereby offered for sale, and for not less than the aggregate principal amount thereof, less any discount or plus any premium as permitted herein, as may be specified in the bid. All bids must be unconditional.

**Only Electronic Bids Through Parity Will Be Accepted.** Only electronic bids submitted through Parity will be accepted. All such bids must conform with the procedures established by Parity.

No bid will be accepted after the time specified for receiving bids. To the extent any instructions or directions set forth in Parity conflict with this Official Notice of Sale, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

For further information about Parity, potential bidders may contact:

Ipreo Prospectus 1359 Broadway, 2nd Floor New York, New York 10018 Telephone: (212) 849-5021

See "TERMS OF SALE – Warning Regarding Electronic Bids."

THE COMMISSION RETAINS ABSOLUTE DISCRETION TO DETERMINE WHETHER ANY BID IS TIMELY AND COMPLETE AND CONFORMS TO THIS OFFICIAL NOTICE OF SALE. THE COMMISSION TAKES NO RESPONSIBILITY FOR INFORMING ANY BIDDER PRIOR TO THE TIME FOR RECEIVING BIDS THAT ANY BID IS INCOMPLETE OR NONCONFORMING OR HAS NOT BEEN RECEIVED.

*WARNING REGARDING ELECTRONIC BIDS*: THE COMMISSION WILL ACCEPT BIDS IN ELECTRONIC FORM SOLELY THROUGH PARITY ON THE OFFICIAL BID FORM CREATED FOR SUCH PURPOSE. EACH BIDDER SUBMITTING AN ELECTRONIC BID UNDERSTANDS AND AGREES BY DOING SO THAT IT IS SOLELY RESPONSIBLE FOR ALL ARRANGEMENTS WITH PARITY AND THAT PARITY IS NOT ACTING AS AN AGENT OF THE COMMISSION. INSTRUCTIONS AND FORMS FOR SUBMITTING ELECTRONIC BIDS MUST BE OBTAINED FROM PARITY AND THE COMMISSION ASSUMES NO RESPONSIBILITY FOR ENSURING OR VERIFYING BIDDER COMPLIANCE WITH THE PROCEDURES OF PARITY. THE COMMISSION SHALL ASSUME THAT ANY BID RECEIVED THROUGH PARITY HAS BEEN MADE BY A DULY AUTHORIZED AGENT OF THE BIDDER.

THE CITY, THE COMMISSION, THE CITY ATTORNEY, THE FINANCIAL ADVISORS AND CO-BOND COUNSEL ASSUME NO RESPONSIBILITY FOR ANY ERROR CONTAINED IN ANY BID SUBMITTED ELECTRONICALLY, OR FOR FAILURE OF ANY BID TO BE TRANSMITTED, RECEIVED OR OPENED AT THE OFFICIAL TIME FOR RECEIPT OF BIDS. EACH BIDDER EXPRESSLY ASSUMES THE RISK OF ANY INCOMPLETE, ILLEGIBLE, UNTIMELY OR NONCONFORMING BID SUBMITTED BY ELECTRONIC TRANSMISSION BY SUCH BIDDER, INCLUDING WITHOUT LIMITATION, BY REASON OF GARBLED TRANSMISSIONS, MECHANICAL FAILURE, ENGAGED TELECOMMUNICATIONS LINES, OR ANY OTHER CAUSE ARISING FROM OR RELATING TO SUBMISSION BY ELECTRONIC TRANSMISSION. THE OFFICIAL TIME FOR RECEIPT OF BIDS WILL BE DETERMINED BY THE COMMISSION AT THE PLACE OF BID OPENING, AND THE COMMISSION SHALL NOT BE REQUIRED TO ACCEPT THE TIME KEPT BY PARITY AS THE OFFICIAL TIME.

Additional Terms and Conditions. By submitting a bid, each bidder thereby agrees to the following terms and conditions:

(1) if any provision in this Official Notice of Sale with respect to the Bonds conflicts with information or terms provided or required by Parity, this Official Notice of Sale, including any amendments or modifications issued through Parity, will control;

(2) each bidder will be solely responsible for making necessary arrangements to access Parity for purposes of submitting its bid in a timely manner and in compliance with the requirements of this Official Notice of Sale;

(3) neither the Commission nor the City will have any duty or obligation to provide or assure access to Parity to any bidder, and neither the Commission nor the City will be responsible for proper operation of, or have any liability for, any delays, interruptions or damages caused by use of Parity or any incomplete, inaccurate or untimely bid submitted by any bidder through Parity;

(4) the Commission is permitting use of Parity as a communication mechanism, and not as an agent of the Commission or the City, to facilitate the submission of electronic bids for the Bonds, Parity is acting as an independent contractor, and is not acting for or on behalf of the Commission or the City;

(5) neither the Commission nor the City is responsible for ensuring or verifying bidder compliance with any procedures established by Parity;

(6) the Commission may regard the electronic transmission of a bid through Parity (including information regarding the purchase price for the Bonds or the interest rates for any maturity of the Bonds) as though the information were physically submitted and executed on the bidder's behalf by a duly authorized signatory;

(7) if a bidder's bid is accepted by the Commission, such bid, this Official Notice of Sale and the information that is transmitted electronically through Parity will form a contract, and the bidder will be bound by the terms of such contract; and

(8) information provided by Parity to bidders will form no part of any bid or of any contract between the Purchaser and the Commission unless that information is included in this Official Notice of Sale or the bid of the Purchaser with respect to the winning bid.

*Multiple Bids*. If multiple bids with respect to the Bonds are received from a single bidder, the Commission will have the right to accept the bid representing the lowest true interest cost ("TIC") to the Commission, and each bidder agrees by submitting any bid to be bound by such best bid.

*Good Faith Deposit*. A good faith deposit (a "Deposit") in the amount of \$5,750,000, payable to the order of the Commission, is required from the Purchaser subsequent to the award of the sale. The Purchaser is required to pay the Deposit to the Trustee, on behalf of the Commission, by wire transfer within two (2) hours after the Commission has communicated the acceptance of an award, using the following wire instructions:

Banking Institution:	U.S. BANK NATIONAL ASSOCIATION
Address:	One California Street, Suite 1000 San Francisco, California 94111
Contact & Telephone No:	Andrew Fung (415) 677-3593
FedWire Bank ABA:	091000022
ACH Bank ABA:	091000022
SWIFT Code:	USBKUS44 IMT
Bank Account No:	180121167365
For the Credit of:	U.S. Bank National Association
Other Beneficiary Information:	SFPUC Water 2012 Sub-Series A Bonds Good Faith Deposit

If the Deposit is not received by that time, the Commission may rescind the award of sale. No interest on the Deposit will accrue to the Purchaser. The Deposit will be applied to the purchase price of the Bonds. If the Purchaser fails to honor its accepted bid, the Deposit will be retained by the Commission as and for full liquidated damages.

If the Purchaser fails to provide the Reoffering Price Certificate, described below, by May 25, 2012, the Deposit will be retained by the Commission.

**Basis of Award**. Unless all bids with respect to the Bonds are rejected, as described below under "-*Right of Rejection and Waiver of Irregularity*," the Bonds will be awarded to the responsible bidder whose bid represents the lowest TIC to the Commission with respect to the Bonds prior to any change to the principal payment schedule in accordance with this Official Notice of Sale. The TIC

will be that nominal annual interest rate which, when compounded semiannually using a 360-day year and used to discount to the dated date of the Bonds all payments of principal and interest payable on the Bonds, results in an amount equal to the purchase price of the Bonds to be received by the Commission. If two or more bidders offer bids for the Bonds at the same lowest TIC, the Commission will determine by lot which bidder will be awarded the Bonds. Bid evaluations or rankings made by Parity are not binding on the Commission.

*Estimate of True Interest Cost.* Each bidder is requested, but not required, to state in each bid the amount of interest payable on the Bonds during the life of the issue and the percentage TIC to the Commission (determined as described above), which will be considered as informative only and not binding on either the bidder or the Commission.

**Right of Rejection and Waiver of Irregularity**. The Commission reserves the right, in its sole and absolute discretion, to reject any and all bids for the Bonds, for any reason. The Commission also reserves the right to waive any irregularity or informality in any bid.

*Time of Award*. The Commission, acting through its General Manager or its Assistant General Manager/Chief Financial Officer, Business and Financial Services, or a designee of the General Manager, will take action awarding the Bonds or rejecting all bids not later than two (2) hours after the date and time at which bids with respect to the Bonds are received, unless such period for award is waived by the Purchaser. Prompt notice of the award will be given to the Purchaser.

**Confirmation of Bond Sizing**. As described herein under "TERMS RELATING TO THE BONDS – Adjustment of Principal Payments" the actual principal amount of the Bonds and the actual maturity schedule (or sinking account payment schedule for term bonds) for the Bonds may be changed by the Commission after the determination of the winning bid. Any such changes will be reported to the Purchaser by 7:00 p.m. (New York time) on the date and time the bids are received. Any such increase or decrease will be in \$5,000 increments with respect to each maturity date or sinking account payment date. If any such adjustment occurs, no rebidding or recalculation of the bids submitted will be required or permitted and no successful bid may be withdrawn. The Purchaser will not be permitted to change the interest rates in its bid. The dollar amount bid by the Purchaser will be adjusted to reflect any adjustments in the aggregate principal amount of the Bonds to be issued.

**Qualification for Sale; Compliance with Blue Sky Laws**. Compliance with Blue Sky and other securities laws and regulations, including the payment of any applicable fees, shall be the sole responsibility of the Purchaser. The Commission will furnish such information and take such action not inconsistent with law as the Purchaser may request and the Commission may deem necessary or appropriate to qualify the Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States of America as may be designated by the Purchaser; provided, however, that the Commission will not execute a general or special consent to service of process or qualify to do business in connection with such qualification or determination in any jurisdiction.

The Purchaser may not sell, offer to sell or solicit any offer to buy, the Bonds in any jurisdiction where it is unlawful for the Purchaser to make such sale, offer or solicitation, and the Purchaser shall comply with the Blue Sky and other securities laws and regulations of the states and jurisdictions in which the Purchaser sells the Bonds.

**Delivery and Payment.** Delivery of the Bonds, in the form of one certificate for each maturity, will be made to the Purchaser through the facilities of DTC in New York, New York, or at any other location mutually agreeable to both the Commission and the Purchaser, as soon as practicable. The anticipated date of delivery of the Bonds is June 7, 2012. Payment for the Bonds (including any premium) must be made by wire transfer in immediately available funds. Any expense for making payment in immediately available funds shall be borne by the Purchaser.

**Reoffering Price Certificate.** The Purchaser must reoffer all of the Bonds to the general public (excluding bond houses, brokers or similar persons or organizations acting in the capacity of underwriters or wholesalers). For this purpose, sales of Bonds to other securities brokers or dealers will not be considered sales to the general public.

Not later than the close of business on the third business day following the date on which the sale of the Bonds is awarded, the Purchaser must deliver to the Commission a certificate in the form attached hereto as Exhibit A (the "Reoffering Price Certificate").

The Purchaser will also be required to provide to the Commission and Co-Bond Counsel such additional information as may be requested by Co-Bond Counsel. If the Reoffering Price Certificate is sent by fax transmission, a hard copy must also be promptly sent by mail or courier service.

Failure to demonstrate compliance with this requirement with respect to the Bonds will constitute a default by the Purchaser, entitling the Commission to retain the Purchaser's Deposit even though in such event the Commission will not deliver the Bonds to the Purchaser.

The Commission and the Financial Advisors will be relying on the indication of the reoffering prices set forth in the Reoffering Price Certificate in determining the arbitrage yield on the Bonds.

*No Litigation*. The Commission will deliver a certificate of the Commission with respect to the Bonds stating that no litigation is pending with service of process having been accomplished, or, to the knowledge of the officer of the Commission executing such certificate, threatened, concerning the validity of the Bonds, the existence of the Commission, or the title of the officers of the Commission who will execute the Bonds to their respective offices.

**CUSIP Numbers**. It is anticipated that CUSIP numbers will be printed on the Bonds and in the Official Statement, but neither the failure to print such numbers nor any error with respect thereto will constitute cause for a failure or refusal by the Purchaser to accept delivery of and pay for the Bonds in accordance with the terms of this Official Notice of Sale. The expenses associated with printing CUSIP numbers on the Bonds will be paid by the Commission; however, the CUSIP Service Bureau charge for the assignment of CUSIP numbers will be paid by the Purchaser. CUSIP data is provided by CUSIP Global Services, managed by Standard and Poor's Financial Services LLC on behalf of The American Bankers Association. CUSIP numbers will be provided for convenience of reference only. Neither the Commission nor the City will take any responsibility for the accuracy of such numbers.

*California Debt and Investment Advisory Commission Fee.* The attention of bidders is directed to California Government Code Section 8856, which provides that the Purchaser of the Bonds will be charged the California Debt and Investment Advisory Commission fee. The Purchaser is responsible for determining the actual fee due. The Commission expects the Purchaser to pay the applicable fee promptly upon receipt of the invoice.

*Certificate Regarding Official Statement*. At the time of delivery of the Bonds, the Purchaser will receive a certificate, signed by an officer of the Commission, confirming to the Purchaser that, to the best knowledge of said officer, the final Official Statement relating to the Bonds (the "Official Statement") (excluding information regarding underwriting, the municipal bond insurance policy or policies and the bond reserve surety bond and the provider or providers thereof, if any, and The Depository Trust Company and its book-entry only system, as to which no view will be expressed) as of the date of sale of the Bonds and as of the date of delivery thereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

*Official Statement*. Electronic copies of the Preliminary Official Statement prepared by the Commission will be furnished to any interested bidder upon request to the Financial Advisors. In accordance with Rule 15c2-12 of the Securities and Exchange Commission ("Rule 15c2-12"), the Commission deems such Preliminary Official Statement final as of its date, except for the omission of certain information permitted by Rule 15c2-12. Within seven (7) business days after the date of award of the Bonds, the Purchaser of the Bonds will be furnished with a reasonable number of copies (not to exceed 150) of the Official Statement, without charge. If the Purchaser requests additional copies of the Official Statement within two (2) days after the award of the Bonds, the Purchaser.

By making a bid for the Bonds, the bidder agrees, if awarded the Bonds, (i) to disseminate to all members of the underwriting syndicate, if any, copies of the Official Statement, including any supplements prepared by the Commission, and (ii) to take any and all other actions necessary to comply with applicable Securities and Exchange Commission and Municipal Securities Rulemaking Board rules governing the offering, sale and delivery of the Bonds to the ultimate purchasers, including without limitation the delivery of an Official Statement to each investor who purchases Bonds.

The form and content of the Official Statement of the Commission is within the sole discretion of the Commission. The Purchaser's name will not appear on the cover of the Official Statement.

*Continuing Disclosure*. In order to assist the Purchaser in complying with Securities and Exchange Commission Rule 15c2-12(b)(5), the Commission will undertake, pursuant to a Continuing Disclosure Certificate, to provide certain annual financial information and notices of the occurrence of certain events. A description of this undertaking and a form of the Continuing Disclosure Certificate are set forth in the Preliminary Official Statement and will also be set forth in the final Official Statement.

**Right to Modify or Amend.** The Commission reserves the right to modify or amend this Official Notice of Sale in any respect; provided, however, that any such modification or amendment will be communicated to potential bidders through Parity not later than 4:00 p.m. (California time) on the business day preceding the date for receiving bids. Failure of any potential bidder to receive notice of any modification or amendment will not affect the sufficiency of any such notice, the modification or amendment to which such notice relates, or the legality of the sale.

**Postponement or Cancellation of Sale**. The Commission reserves the right to postpone or cancel the sale of the Bonds at or prior to the time bids are to be received with respect to the Bonds.

Notice of such postponement or cancellation will be given through Parity as soon as practicable following such postponement or cancellation. If the sale is postponed, notice of a new sale date will be given through Parity not later than 4:00 p.m. (California time) on the business day preceding the new sale date that bids are to be received. On any new sale date, any bidder may submit a bid for the purchase of the Bonds, which shall be in conformity in all respects with the provisions of this Official Notice of Sale except for the time or date and time of sale and any other changes announced through Parity.

Failure of any potential bidder to receive notice of cancellation or postponement shall not affect the sufficiency of any such notice, or affect the right of the Commission to cancel or postpone the sale. If a sale is postponed only, any subsequent bid submitted by a bidder with respect to such sale will supersede any prior bid made. If a sale is cancelled, all bids with respect to such sale will be deemed cancelled.

*Equal Opportunity*. Pursuant to the spirit and intent of the City's Disadvantaged Business Enterprise ("DBE") Ordinance, Chapter 14A of the Administrative Code of the City, the Commission strongly encourages the inclusion of Disadvantaged Business Enterprises certified by the San Francisco Human Rights Commission on prospective proposing syndicate/teams. A list of certified DBEs can be obtained by contacting the San Francisco Human Rights Commission at 25 Van Ness Avenue, Room 800, San Francisco, California 94102, (415) 252-2500.

Dated: May 10, 2012

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# EXHIBIT A

#### **REOFFERING PRICE CERTIFICATE**

#### PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES A (WSIP)

# (TO BE DELIVERED BY THE ORIGINAL PURCHASER AS DESCRIBED IN THE OFFICIAL NOTICE OF SALE UNDER "TERMS OF SALE – REOFFERING PRICE CERTIFICATE")

This Certificate is furnished by \_\_\_\_\_, as original purchaser (the "Original Purchaser") of \$\_\_\_\_\_\_ aggregate principal amount of the revenue bonds captioned above (the "**Bonds**"), to establish the initial offering price of said portion of the Bonds for purposes of determining the "issue price" of the Bonds within the meaning of Section 1273 of the Internal Revenue Code of 1986, as amended (the "**Code**").

The Original Purchaser DOES HEREBY CERTIFY as follows:

1. The Original Purchaser made a bona fide offering, beginning on \_\_\_\_\_\_, 2012, the date on which the Original Purchaser agreed to purchase the Bonds (the "Sale Date"), of all of the Bonds of each maturity to the General Public (hereinafter defined) at their respective initial offering prices, as set forth in Exhibit \_\_\_\_ hereto (each, an "Initial Public Offering Price"), and reasonably expected on the Sale Date to sell the Bonds of each maturity to the General Public Offering Prices.

2. The aggregate of the Initial Public Offering Prices is \$\_\_\_\_\_\_ (representing \$\_\_\_\_\_\_ aggregate principal amount of the Bonds, [plus] [minus] [net] original issue [premium] [discount] of \$\_\_\_\_\_\_).

3. [Except for Bonds maturing on \_\_\_\_\_, 20\_\_, \_\_\_\_, 20\_\_, and \_\_\_\_, 20\_\_ (the "**Undersold Bonds**"), with] [With] respect to each maturity of the Bonds, the Original Purchaser first sold for cash at least 10% of the aggregate principal amount of the Bonds to the General Public at their Initial Public Offering Price.

[4.] With respect to [each maturity of] the Undersold Bonds, despite the reasonable expectation of the Original Purchaser to sell the Bonds at their [respective] Initial Public Offering Price[s], the Original Purchaser did not sell at least 10% of the Bonds [of the maturity] to the General Public at their [respective] Initial Public Offering Price[s]. [PROVIDE EXPLANATION].<sup>‡</sup>

[4.] [5.] For purposes of this Certificate, the term "**General Public**" excludes bond houses, brokers and similar persons or organizations acting in the capacity of underwriters or wholesalers.

<sup>&</sup>lt;sup>‡</sup> For any maturity of Undersold Bonds, the successful bidder will be required to supply an explanation, satisfactory to the issuer, as to why the successful bidder did not sell at least 10% of each such maturity.

Nothing herein represents the Original Purchaser's interpretation of any laws, and in particular, regulations under Section 148 of the Code.

Capitalized terms used herein and not otherwise defined have the meanings ascribed thereto in the Amended and Restated Indenture dated as of August 1, 2002, by and between the Commission and U.S. Bank National Association, as amended and supplemented to date.

Dated: \_\_\_\_\_, 2012

[NAME OF UNDERWRITER]

By: \_\_\_\_\_\_[NAME] [TITLE]

# **EXHIBIT 1 TO REOFFERING PRICE CERTIFICATE**

Maturity Date (November 1) Principal <u>Amount</u>

Interest <u>Rate</u>

Yield

Reoffering Price\* %

\* Stated as a percentage of par.

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## **OFFICIAL NOTICE OF SALE**

### \$16,150,000<sup>\*</sup> PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES B (PROP. A REIMBURSEMENT)

NOTICE IS HEREBY GIVEN that proposals will be received in electronic form only and solely through BiDCOMP<sup>TM</sup>/Parity<sup>®</sup> ("Parity"), in the manner described below, by the Public Utilities Commission of the City and County of San Francisco (the "Commission"), at the offices of the Commission on:

### May 22, 2012, at 8:00 a.m. (California time)

(subject to postponement or cancellation in accordance with this Official Notice of Sale)

for the purchase of the revenue bonds captioned above (the "Bonds") of the Commission more particularly described below. See "TERMS OF SALE – *Warning Regarding Electronic Bids.*"

The Commission reserves the right to postpone, from time to time, the date established for receipt and opening of bids with respect to the Bonds. Notice of any postponement will be communicated through Parity as soon as practicable following postponement. See "TERMS OF SALE – *Postponement or Cancellation of Sale*."

The Commission reserves the right to cancel the sale of the Bonds. Notice of cancellation will be given through Parity as soon as practicable following such cancellation. See "TERMS OF SALE –*Postponement or Cancellation of Sale*."

Notice of any change in the terms of the sale of the Bonds will be given through Parity by 4:00 p.m. California time the day before the sale. See "TERMS RELATING TO THE BONDS – *Adjustment of Principal Payments*" and "TERMS OF SALE – *Right to Modify or Amend*." As an accommodation to bidders, telephone, facsimile or electronic notice of any amendment or modification of this Official Notice of Sale will be given to any bidder requesting such notice from either of the Commission's financial advisors (the "Financial Advisors"):

Montague DeRose and Associates, LLC 2175 N. California Boulevard, Suite 745 Walnut Creek, California 94596 Attention: Chia Yang	Backstrom McCarley Berry & Co., LLC 115 Sansome Street, Mezzanine A San Francisco, California 94104 Attention: Vincent McCarley
Telephone: (925) 212-4889	Telephone: (415) 392-5505
Facsimile: (925) 256-9795	Facsimile: (415) 392-5276
E-mail: yang@montaguederose.com	E-mail: vmccarley@bmcbco.com

<sup>\*</sup> Subject to adjustment in accordance with this Official Notice of Sale.

Failure of any bidder to receive any such supplemental notice shall not affect the sufficiency of any required notice or the legality of the sale.

Bidders are directed to the Preliminary Official Statement of the Commission dated the date hereof with respect to the Bonds (the "Preliminary Official Statement") for additional information regarding the Commission, the Water Enterprise (as defined in the Preliminary Official Statement), the City and County of San Francisco (the "City"), the Bonds and the security therefor, and other matters. See "TERMS OF SALE – *Official Statement*" below.

This Official Notice of Sale will be submitted to Ipreo Prospectus ("Ipreo") for posting on its website (www.i-dealprospectus.com) and in the Parity bid delivery system. If any summary of the terms of the sale of the Bonds posted by Ipreo or Parity conflicts with this Official Notice of Sale in any respect, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

#### **TERMS RELATING TO THE BONDS**

THE AUTHORITY FOR ISSUANCE, PURPOSE, PRINCIPAL AND INTEREST REPAYMENT, SECURITY AND SOURCES OF PAYMENT, THE LEGAL OPINION AND ALL OTHER INFORMATION REGARDING THE BONDS ARE PRESENTED IN THE PRELIMINARY OFFICIAL STATEMENT, DATED MAY 10, 2012 (THE "PRELIMINARY OFFICIAL STATEMENT") WHICH EACH BIDDER IS DEEMED TO HAVE OBTAINED AND REVIEWED PRIOR TO BIDDING FOR THE BONDS. THIS OFFICIAL NOTICE OF SALE GOVERNS ONLY THE TERMS OF SALE, BIDDING, AWARD AND CLOSING PROCEDURES FOR THE BONDS. THE DESCRIPTION OF THE BONDS CONTAINED IN THIS OFFICIAL NOTICE OF SALE IS QUALIFIED IN ALL RESPECTS BY THE DESCRIPTION CONTAINED IN THE PRELIMINARY OFFICIAL STATEMENT.

Subject to the foregoing, the Bonds are generally described as follows:

*Authority for the Bonds*. The Commission is issuing the Bonds under the Charter of the City and under an Amended and Restated Indenture, dated as of August 1, 2002 (the "Original Indenture"), by and between the Commission and U.S. Bank National Association, as trustee (the "Trustee"), as amended and supplemented, and as further supplemented by a Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture"), by and between the Trustee and the Commission, a Seventeenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Eighteenth Supplemental Indenture"), by and between the Trustee and the Commission, as amended and supplemental Indenture.

The purchaser of the Bonds is deemed to consent to certain amendments contained in the Fifth Supplemental Indenture by and between the Trustee and the Commission, dated as of June 1, 2010. See "INTRODUCTION – Amendments Effected by Fifth Supplemental Indenture" in the Preliminary Official Statement.

*Issue*. The Bonds are fully registered bonds without coupons in book-entry form in denominations of \$5,000 or any integral multiple thereof, as designated by the successful bidder thereof (the "Purchaser"), all dated the date of their original issuance. Potential bidders will be notified via Parity, not later than 4:00 p.m. (California time) on the business day prior to the

time prescribed for the receipt of bids, of any change to the principal payment schedule for the Bonds to be used for the bidding process. In addition, the Commission reserves the right, following the determination of the best bid for the Bonds, to adjust the actual principal payment schedule. See "TERMS RELATING TO THE BONDS – *Principal Payments*" and "– *Adjustment of Principal Payments*" below.

*Interest Rates*. Interest on the Bonds will be payable semiannually on May 1 and November 1 of each year, commencing November 1, 2012 (each, an "Interest Payment Date"). Interest on the Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day consecutive months.

Bidders must specify the rate or rates of interest which the Bonds for which they are bidding will bear; provided, that the following limitations apply:

(i) the maximum interest rate bid may not exceed 12% per annum;

(ii) each interest rate specified in any bid must be a multiple of 1/8 or 1/20 of 1% per annum and a zero rate of interest cannot be named;

(iii) each Bond shall bear interest from its date to its stated maturity date at the single rate of interest specified in the bid; and

(iv) all Bonds of a sub-series maturing at any one time shall bear the same rate of interest.

**Premium and Discount.** No bid offering to pay an amount less than 99 percent or more than 106 percent of the par value of the Bonds will be considered. Each maturity of the Bonds must be reoffered at a yield that will produce a price of not less than 98 percent.

**Principal Payments.** The Bonds maturing on November 1 in any or all years 2031 through 2042, both inclusive, shall be serial and/or term bonds, as specified by each bidder. The principal amount of Bonds maturing or subject to mandatory sinking fund redemption in any year shall be in integral multiples of \$5,000. For any term Bonds specified, the principal amount for a given year may be allocated only to a single term bond and must be part of an uninterrupted annual sequence from the first mandatory sinking fund payment to the term bond maturity.

An estimate of the principal payment schedule for the Bonds is set forth below.

Date (November 1)	Principal Payment <sup>*</sup>
2031	\$ 1,080,000
2032	1,120,000
2033	1,160,000
2034	1,210,000
2035	1,255,000
2036	1,305,000
2037	1,355,000
2038	1,405,000
2039	1,465,000
2040	1,525,000

Date	Principal
(November 1)	Payment*
2041	1,595,000
2042	1,675,000
	\$16,150,000

\* Preliminary, subject to change.

Information related to the principal payment schedule of the Bonds will be updated on Parity one day prior to the sale of the Bonds. See "*Adjustment of Principal Payments*" below.

Adjustment of Principal Payments. The principal payment amounts set forth in this Official Notice of Sale reflect certain estimates of the Commission with respect to the likely interest rates of the winning bid and the premium contained in the winning bid. Potential bidders will be notified via Parity not later than 4:00 p.m. (California time) on the business day preceding the date then prescribed for the receipt of bids of any change to the principal payment schedule for the Bonds to be utilized for the bidding process. The Commission reserves the right to change the principal payment schedule set forth in this Official Notice of Sale for the Bonds after the determination of the winning bidder for the Bonds, by adjusting one or more principal payments of the Bonds in increments of \$5,000 by not more than 10% for any maturity in order to achieve its financing objectives; provided, however, that the aggregate principal amount of the Bonds shall not exceed \$17,000,000.<sup>\*</sup>

NO PURCHASER MAY WITHDRAW ANY BID OR CHANGE THE INTEREST RATES BID OR THE REOFFERING PRICES IN ITS REOFFERING PRICE CERTIFICATE AS A RESULT OF ANY CHANGE MADE TO THE PRINCIPAL PAYMENTS OF THE BONDS IN ACCORDANCE WITH THIS OFFICIAL NOTICE OF SALE. FURTHER, IF THE COMMISSION CHANGES THE PRINCIPAL PAYMENT SCHEDULE FOR THE BONDS AFTER THE RECEIPT OF BIDS, THE UNDERWRITER'S DISCOUNT, EXPRESSED IN DOLLARS PER THOUSAND DOLLAR OF BONDS, WILL BE HELD CONSTANT. THE COMMISSION WILL NOT BE RESPONSIBLE, IF AND TO THE EXTENT THAT, ANY ADJUSTMENT AFFECTS (i) THE NET COMPENSATION TO BE REALIZED BY THE PURCHASER OR (ii) THE TRUE INTEREST COST OF THE WINNING BID OR THE RANKING OF ANY BID RELATIVE TO OTHER BIDS.

**Redemption.**<sup>\*</sup> The Bonds maturing on or after November 1, 2022 shall be subject to redemption prior to their stated maturity, at the option of the Commission, from and to the extent of any source of available funds, as a whole or in part, on any date on or after May 1, 2022, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Tax Matters and Legal Opinions.* Upon delivery of the Bonds, Co-Bond Counsel, Sidley Austin LLP and Curls Bartling P.C., will deliver to the Commission opinions to the effect that based on existing statutes, regulations, rulings and judicial decisions and assuming compliance with certain covenants in the documents pertaining to the Bonds and requirements of the Internal Revenue Code

<sup>\*</sup> Preliminary, subject to change. If revisions are made to the principal amortization schedule prior to the sale date, the not to exceed amount will be equal to 110% of the revised aggregate principal amount of the Bonds.

of 1986, as amended, interest on the Bonds is not includable in the gross income of the owners of the Bonds for federal income tax purposes. In the further opinions of Co-Bond Counsel, interest on the Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals and corporations. Interest on the Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may, therefore, affect a corporation's alternative minimum tax liability. In the further opinions of Co-Bond Counsel, interest on the Bonds is exempt from personal income taxes imposed by the State of California. See "TAX MATTERS" in the Preliminary Official Statement.

A complete copy of the proposed form of opinions of Co-Bond Counsel is set forth in Appendix F to the Preliminary Official Statement. A copy of the approving legal opinions of Sidley Austin LLP and Curls Bartling P.C., Co-Bond Counsel with respect to the Bonds, will be furnished to the Purchaser upon delivery of the Bonds. Copies of said opinions will be filed with the Depository Trust Company ("DTC") and with the City Treasurer.

## TERMS OF SALE

*Single Bid for the Bonds*. Each bid for the Bonds must be for all, and not less than all, of the Bonds hereby offered for sale, and for not less than the aggregate principal amount thereof, less any discount or plus any premium as permitted herein, as may be specified in the bid. All bids must be unconditional.

**Only Electronic Bids Through Parity Will Be Accepted.** Only electronic bids submitted through Parity will be accepted. All such bids must conform with the procedures established by Parity.

No bid will be accepted after the time specified for receiving bids. To the extent any instructions or directions set forth in Parity conflict with this Official Notice of Sale, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

For further information about Parity, potential bidders may contact:

Ipreo Prospectus 1359 Broadway, 2nd Floor New York, New York 10018 Telephone: (212) 849-5021

See "TERMS OF SALE – Warning Regarding Electronic Bids."

THE COMMISSION RETAINS ABSOLUTE DISCRETION TO DETERMINE WHETHER ANY BID IS TIMELY AND COMPLETE AND CONFORMS TO THIS OFFICIAL NOTICE OF SALE. THE COMMISSION TAKES NO RESPONSIBILITY FOR INFORMING ANY BIDDER PRIOR TO THE TIME FOR RECEIVING BIDS THAT ANY BID IS INCOMPLETE OR NONCONFORMING OR HAS NOT BEEN RECEIVED.

*WARNING REGARDING ELECTRONIC BIDS*: THE COMMISSION WILL ACCEPT BIDS IN ELECTRONIC FORM SOLELY THROUGH PARITY ON THE OFFICIAL BID FORM CREATED FOR SUCH PURPOSE. EACH BIDDER SUBMITTING AN ELECTRONIC BID UNDERSTANDS AND AGREES BY DOING SO THAT IT IS SOLELY RESPONSIBLE FOR ALL ARRANGEMENTS WITH PARITY AND THAT PARITY IS NOT ACTING AS AN AGENT OF THE COMMISSION. INSTRUCTIONS AND FORMS FOR SUBMITTING ELECTRONIC BIDS MUST BE OBTAINED FROM PARITY AND THE COMMISSION ASSUMES NO RESPONSIBILITY FOR ENSURING OR VERIFYING BIDDER COMPLIANCE WITH THE PROCEDURES OF PARITY. THE COMMISSION SHALL ASSUME THAT ANY BID RECEIVED THROUGH PARITY HAS BEEN MADE BY A DULY AUTHORIZED AGENT OF THE BIDDER.

THE CITY, THE COMMISSION, THE CITY ATTORNEY, THE FINANCIAL ADVISORS AND CO-BOND COUNSEL ASSUME NO RESPONSIBILITY FOR ANY ERROR CONTAINED IN ANY BID SUBMITTED ELECTRONICALLY, OR FOR FAILURE OF ANY BID TO BE TRANSMITTED, RECEIVED OR OPENED AT THE OFFICIAL TIME FOR RECEIPT OF BIDS. EACH BIDDER EXPRESSLY ASSUMES THE RISK OF ANY INCOMPLETE, ILLEGIBLE, UNTIMELY OR NONCONFORMING BID SUBMITTED BY ELECTRONIC TRANSMISSION BY SUCH BIDDER, INCLUDING WITHOUT LIMITATION, BY REASON OF GARBLED TRANSMISSIONS, MECHANICAL FAILURE, ENGAGED TELECOMMUNICATIONS LINES, OR ANY OTHER CAUSE ARISING FROM OR RELATING TO SUBMISSION BY ELECTRONIC TRANSMISSION. THE OFFICIAL TIME FOR RECEIPT OF BIDS WILL BE DETERMINED BY THE COMMISSION AT THE PLACE OF BID OPENING, AND THE COMMISSION SHALL NOT BE REQUIRED TO ACCEPT THE TIME KEPT BY PARITY AS THE OFFICIAL TIME.

Additional Terms and Conditions. By submitting a bid, each bidder thereby agrees to the following terms and conditions:

(1) if any provision in this Official Notice of Sale with respect to the Bonds conflicts with information or terms provided or required by Parity, this Official Notice of Sale, including any amendments or modifications issued through Parity, will control;

(2) each bidder will be solely responsible for making necessary arrangements to access Parity for purposes of submitting its bid in a timely manner and in compliance with the requirements of this Official Notice of Sale;

(3) neither the Commission nor the City will have any duty or obligation to provide or assure access to Parity to any bidder, and neither the Commission nor the City will be responsible for proper operation of, or have any liability for, any delays, interruptions or damages caused by use of Parity or any incomplete, inaccurate or untimely bid submitted by any bidder through Parity;

(4) the Commission is permitting use of Parity as a communication mechanism, and not as an agent of the Commission or the City, to facilitate the submission of electronic bids for the Bonds, Parity is acting as an independent contractor, and is not acting for or on behalf of the Commission or the City;

(5) neither the Commission nor the City is responsible for ensuring or verifying bidder compliance with any procedures established by Parity;

(6) the Commission may regard the electronic transmission of a bid through Parity (including information regarding the purchase price for the Bonds or the interest rates for any maturity of the Bonds) as though the information were physically submitted and executed on the bidder's behalf by a duly authorized signatory;

(7) if a bidder's bid is accepted by the Commission, such bid, this Official Notice of Sale and the information that is transmitted electronically through Parity will form a contract, and the bidder will be bound by the terms of such contract; and

(8) information provided by Parity to bidders will form no part of any bid or of any contract between the Purchaser and the Commission unless that information is included in this Official Notice of Sale or the bid of the Purchaser with respect to the winning bid.

*Multiple Bids*. If multiple bids with respect to the Bonds are received from a single bidder, the Commission will have the right to accept the bid representing the lowest true interest cost ("TIC") to the Commission, and each bidder agrees by submitting any bid to be bound by such best bid.

*Good Faith Deposit*. A good faith deposit (a "Deposit") in the amount of \$160,000, payable to the order of the Commission, is required from the Purchaser subsequent to the award of the sale. The Purchaser is required to pay the Deposit to the Trustee, on behalf of the Commission, by wire transfer within two (2) hours after the Commission has communicated the acceptance of an award, using the following wire instructions:

Banking Institution:	U.S. BANK NATIONAL ASSOCIATION
Address:	One California Street, Suite 1000 San Francisco, California 94111
Contact & Telephone No:	Andrew Fung (415) 677-3593
FedWire Bank ABA:	091000022
ACH Bank ABA:	091000022
SWIFT Code:	USBKUS44 IMT
Bank Account No:	180121167365
For the Credit of:	U.S. Bank National Association
Other Beneficiary Information:	SFPUC Water 2012 Sub-Series B Bonds Good Faith Deposit

If the Deposit is not received by that time, the Commission may rescind the award of sale. No interest on the Deposit will accrue to the Purchaser. The Deposit will be applied to the purchase price of the Bonds. If the Purchaser fails to honor its accepted bid, the Deposit will be retained by the Commission as and for full liquidated damages.

If the Purchaser fails to provide the Reoffering Price Certificate, described below, by May 25, 2012, the Deposit will be retained by the Commission.

**Basis of Award**. Unless all bids with respect to the Bonds are rejected, as described below under "-*Right of Rejection and Waiver of Irregularity*," the Bonds will be awarded to the responsible bidder whose bid represents the lowest TIC to the Commission with respect to the Bonds prior to any change to the principal payment schedule in accordance with this Official Notice of Sale. The TIC

will be that nominal annual interest rate which, when compounded semiannually using a 360-day year and used to discount to the dated date of the Bonds all payments of principal and interest payable on the Bonds, results in an amount equal to the purchase price of the Bonds to be received by the Commission. If two or more bidders offer bids for the Bonds at the same lowest TIC, the Commission will determine by lot which bidder will be awarded the Bonds. Bid evaluations or rankings made by Parity are not binding on the Commission.

*Estimate of True Interest Cost.* Each bidder is requested, but not required, to state in each bid the amount of interest payable on the Bonds during the life of the issue and the percentage TIC to the Commission (determined as described above), which will be considered as informative only and not binding on either the bidder or the Commission.

**Right of Rejection and Waiver of Irregularity**. The Commission reserves the right, in its sole and absolute discretion, to reject any and all bids for the Bonds, for any reason. The Commission also reserves the right to waive any irregularity or informality in any bid.

*Time of Award*. The Commission, acting through its General Manager or its Assistant General Manager/Chief Financial Officer, Business and Financial Services, or a designee of the General Manager, will take action awarding the Bonds or rejecting all bids not later than two (2) hours after the date and time at which bids with respect to the Bonds are received, unless such period for award is waived by the Purchaser. Prompt notice of the award will be given to the Purchaser.

**Confirmation of Bond Sizing**. As described herein under "TERMS RELATING TO THE BONDS – Adjustment of Principal Payments" the actual principal amount of the Bonds and the actual maturity schedule (or sinking account payment schedule for term bonds) for the Bonds may be changed by the Commission after the determination of the winning bid. Any such changes will be reported to the Purchaser by 7:00 p.m. (New York time) on the date and time the bids are received. Any such increase or decrease will be in \$5,000 increments with respect to each maturity date or sinking account payment date. If any such adjustment occurs, no rebidding or recalculation of the bids submitted will be required or permitted and no successful bid may be withdrawn. The Purchaser will not be permitted to change the interest rates in its bid. The dollar amount bid by the Purchaser will be adjusted to reflect any adjustments in the aggregate principal amount of the Bonds to be issued.

**Qualification for Sale; Compliance with Blue Sky Laws**. Compliance with Blue Sky and other securities laws and regulations, including the payment of any applicable fees, shall be the sole responsibility of the Purchaser. The Commission will furnish such information and take such action not inconsistent with law as the Purchaser may request and the Commission may deem necessary or appropriate to qualify the Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States of America as may be designated by the Purchaser; provided, however, that the Commission will not execute a general or special consent to service of process or qualify to do business in connection with such qualification or determination in any jurisdiction.

The Purchaser may not sell, offer to sell or solicit any offer to buy, the Bonds in any jurisdiction where it is unlawful for the Purchaser to make such sale, offer or solicitation, and the Purchaser shall comply with the Blue Sky and other securities laws and regulations of the states and jurisdictions in which the Purchaser sells the Bonds.

**Delivery and Payment.** Delivery of the Bonds, in the form of one certificate for each maturity, will be made to the Purchaser through the facilities of DTC in New York, New York, or at any other location mutually agreeable to both the Commission and the Purchaser, as soon as practicable. The anticipated date of delivery of the Bonds is June 7, 2012. Payment for the Bonds (including any premium) must be made by wire transfer in immediately available funds. Any expense for making payment in immediately available funds shall be borne by the Purchaser.

**Reoffering Price Certificate.** The Purchaser must reoffer all of the Bonds to the general public (excluding bond houses, brokers or similar persons or organizations acting in the capacity of underwriters or wholesalers). For this purpose, sales of Bonds to other securities brokers or dealers will not be considered sales to the general public.

Not later than the close of business on the third business day following the date on which the sale of the Bonds is awarded, the Purchaser must deliver to the Commission a certificate in the form attached hereto as Exhibit A (the "Reoffering Price Certificate").

The Purchaser will also be required to provide to the Commission and Co-Bond Counsel such additional information as may be requested by Co-Bond Counsel. If the Reoffering Price Certificate is sent by fax transmission, a hard copy must also be promptly sent by mail or courier service.

Failure to demonstrate compliance with this requirement with respect to the Bonds will constitute a default by the Purchaser, entitling the Commission to retain the Purchaser's Deposit even though in such event the Commission will not deliver the Bonds to the Purchaser.

The Commission and the Financial Advisors will be relying on the indication of the reoffering prices set forth in the Reoffering Price Certificate in determining the arbitrage yield on the Bonds.

*No Litigation*. The Commission will deliver a certificate of the Commission with respect to the Bonds stating that no litigation is pending with service of process having been accomplished, or, to the knowledge of the officer of the Commission executing such certificate, threatened, concerning the validity of the Bonds, the existence of the Commission, or the title of the officers of the Commission who will execute the Bonds to their respective offices.

**CUSIP Numbers**. It is anticipated that CUSIP numbers will be printed on the Bonds and in the Official Statement, but neither the failure to print such numbers nor any error with respect thereto will constitute cause for a failure or refusal by the Purchaser to accept delivery of and pay for the Bonds in accordance with the terms of this Official Notice of Sale. The expenses associated with printing CUSIP numbers on the Bonds will be paid by the Commission; however, the CUSIP Service Bureau charge for the assignment of CUSIP numbers will be paid by the Purchaser. CUSIP data is provided by CUSIP Global Services, managed by Standard and Poor's Financial Services LLC on behalf of The American Bankers Association. CUSIP numbers will be provided for convenience of reference only. Neither the Commission nor the City will take any responsibility for the accuracy of such numbers.

*California Debt and Investment Advisory Commission Fee.* The attention of bidders is directed to California Government Code Section 8856, which provides that the Purchaser of the Bonds will be charged the California Debt and Investment Advisory Commission fee. The Purchaser is responsible for determining the actual fee due. The Commission expects the Purchaser to pay the applicable fee promptly upon receipt of the invoice.

*Certificate Regarding Official Statement*. At the time of delivery of the Bonds, the Purchaser will receive a certificate, signed by an officer of the Commission, confirming to the Purchaser that, to the best knowledge of said officer, the final Official Statement relating to the Bonds (the "Official Statement") (excluding information regarding underwriting, the municipal bond insurance policy or policies and the bond reserve surety bond and the provider or providers thereof, if any, and The Depository Trust Company and its book-entry only system, as to which no view will be expressed) as of the date of sale of the Bonds and as of the date of delivery thereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

*Official Statement*. Electronic copies of the Preliminary Official Statement prepared by the Commission will be furnished to any interested bidder upon request to the Financial Advisors. In accordance with Rule 15c2-12 of the Securities and Exchange Commission ("Rule 15c2-12"), the Commission deems such Preliminary Official Statement final as of its date, except for the omission of certain information permitted by Rule 15c2-12. Within seven (7) business days after the date of award of the Bonds, the Purchaser of the Bonds will be furnished with a reasonable number of copies (not to exceed 150) of the Official Statement, without charge. If the Purchaser requests additional copies of the Official Statement within two (2) days after the award of the Bonds, the Purchaser.

By making a bid for the Bonds, the bidder agrees, if awarded the Bonds, (i) to disseminate to all members of the underwriting syndicate, if any, copies of the Official Statement, including any supplements prepared by the Commission, and (ii) to take any and all other actions necessary to comply with applicable Securities and Exchange Commission and Municipal Securities Rulemaking Board rules governing the offering, sale and delivery of the Bonds to the ultimate purchasers, including without limitation the delivery of an Official Statement to each investor who purchases Bonds.

The form and content of the Official Statement of the Commission is within the sole discretion of the Commission. The Purchaser's name will not appear on the cover of the Official Statement.

*Continuing Disclosure*. In order to assist the Purchaser in complying with Securities and Exchange Commission Rule 15c2-12(b)(5), the Commission will undertake, pursuant to a Continuing Disclosure Certificate, to provide certain annual financial information and notices of the occurrence of certain events. A description of this undertaking and a form of the Continuing Disclosure Certificate are set forth in the Preliminary Official Statement and will also be set forth in the final Official Statement.

**Right to Modify or Amend.** The Commission reserves the right to modify or amend this Official Notice of Sale in any respect; provided, however, that any such modification or amendment will be communicated to potential bidders through Parity not later than 4:00 p.m. (California time) on the business day preceding the date for receiving bids. Failure of any potential bidder to receive notice of any modification or amendment will not affect the sufficiency of any such notice, the modification or amendment to which such notice relates, or the legality of the sale.

**Postponement or Cancellation of Sale**. The Commission reserves the right to postpone or cancel the sale of the Bonds at or prior to the time bids are to be received with respect to the Bonds.

Notice of such postponement or cancellation will be given through Parity as soon as practicable following such postponement or cancellation. If the sale is postponed, notice of a new sale date will be given through Parity not later than 4:00 p.m. (California time) on the business day preceding the new sale date that bids are to be received. On any new sale date, any bidder may submit a bid for the purchase of the Bonds, which shall be in conformity in all respects with the provisions of this Official Notice of Sale except for the time or date and time of sale and any other changes announced through Parity.

Failure of any potential bidder to receive notice of cancellation or postponement shall not affect the sufficiency of any such notice, or affect the right of the Commission to cancel or postpone the sale. If a sale is postponed only, any subsequent bid submitted by a bidder with respect to such sale will supersede any prior bid made. If a sale is cancelled, all bids with respect to such sale will be deemed cancelled.

*Equal Opportunity*. Pursuant to the spirit and intent of the City's Disadvantaged Business Enterprise ("DBE") Ordinance, Chapter 14A of the Administrative Code of the City, the Commission strongly encourages the inclusion of Disadvantaged Business Enterprises certified by the San Francisco Human Rights Commission on prospective proposing syndicate/teams. A list of certified DBEs can be obtained by contacting the San Francisco Human Rights Commission at 25 Van Ness Avenue, Room 800, San Francisco, California 94102, (415) 252-2500.

Dated: May 10, 2012

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# EXHIBIT A

#### **REOFFERING PRICE CERTIFICATE**

#### PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES B (PROP. A REIMBURSEMENT)

# (TO BE DELIVERED BY THE ORIGINAL PURCHASER AS DESCRIBED IN THE OFFICIAL NOTICE OF SALE UNDER "TERMS OF SALE – REOFFERING PRICE CERTIFICATE")

This Certificate is furnished by \_\_\_\_\_, as original purchaser (the "Original Purchaser") of \$\_\_\_\_\_\_ aggregate principal amount of the revenue bonds captioned above (the "**Bonds**"), to establish the initial offering price of said portion of the Bonds for purposes of determining the "issue price" of the Bonds within the meaning of Section 1273 of the Internal Revenue Code of 1986, as amended (the "**Code**").

The Original Purchaser DOES HEREBY CERTIFY as follows:

1. The Original Purchaser made a bona fide offering, beginning on \_\_\_\_\_\_, 2012, the date on which the Original Purchaser agreed to purchase the Bonds (the "Sale Date"), of all of the Bonds of each maturity to the General Public (hereinafter defined) at their respective initial offering prices, as set forth in Exhibit \_\_\_\_ hereto (each, an "Initial Public Offering Price"), and reasonably expected on the Sale Date to sell the Bonds of each maturity to the General Public Offering Prices.

2. The aggregate of the Initial Public Offering Prices is \$\_\_\_\_\_\_ (representing \$\_\_\_\_\_\_ aggregate principal amount of the Bonds, [plus] [minus] [net] original issue [premium] [discount] of \$\_\_\_\_\_\_).

3. [Except for Bonds maturing on \_\_\_\_\_, 20\_\_, \_\_\_\_, 20\_\_, and \_\_\_\_, 20\_\_ (the "**Undersold Bonds**"), with] [With] respect to each maturity of the Bonds, the Original Purchaser first sold for cash at least 10% of the aggregate principal amount of the Bonds to the General Public at their Initial Public Offering Price.

[4.] With respect to [each maturity of] the Undersold Bonds, despite the reasonable expectation of the Original Purchaser to sell the Bonds at their [respective] Initial Public Offering Price[s], the Original Purchaser did not sell at least 10% of the Bonds [of the maturity] to the General Public at their [respective] Initial Public Offering Price[s]. [PROVIDE EXPLANATION].<sup>‡</sup>

[4.] [5.] For purposes of this Certificate, the term "**General Public**" excludes bond houses, brokers and similar persons or organizations acting in the capacity of underwriters or wholesalers.

<sup>&</sup>lt;sup>‡</sup> For any maturity of Undersold Bonds, the successful bidder will be required to supply an explanation, satisfactory to the issuer, as to why the successful bidder did not sell at least 10% of each such maturity.

Nothing herein represents the Original Purchaser's interpretation of any laws, and in particular, regulations under Section 148 of the Code.

Capitalized terms used herein and not otherwise defined have the meanings ascribed thereto in the Amended and Restated Indenture dated as of August 1, 2002, by and between the Commission and U.S. Bank National Association, as amended and supplemented to date.

Dated: \_\_\_\_\_, 2012

[NAME OF UNDERWRITER]

By: \_\_\_\_\_\_[NAME] [TITLE]

# **EXHIBIT 1 TO REOFFERING PRICE CERTIFICATE**

Maturity Date (November 1) Principal <u>Amount</u>

Interest <u>Rate</u>

Yield

Reoffering Price\* %

\* Stated as a percentage of par.

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## **OFFICIAL NOTICE OF SALE**

### \$94,180,000<sup>\*</sup> PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES C (REFUNDING)

NOTICE IS HEREBY GIVEN that proposals will be received in electronic form only and solely through BiDCOMP<sup>TM</sup>/Parity<sup>®</sup> ("Parity"), in the manner described below, by the Public Utilities Commission of the City and County of San Francisco (the "Commission"), at the offices of the Commission on:

### May 22, 2012, at 8:30 a.m. (California time)

(subject to postponement or cancellation in accordance with this Official Notice of Sale)

for the purchase of the revenue bonds captioned above (the "Bonds") of the Commission more particularly described below. See "TERMS OF SALE – *Warning Regarding Electronic Bids*."

The Commission reserves the right to postpone, from time to time, the date established for receipt and opening of bids with respect to the Bonds. Notice of any postponement will be communicated through Parity as soon as practicable following postponement. See "TERMS OF SALE – *Postponement or Cancellation of Sale*."

The Commission reserves the right to cancel the sale of the Bonds. Notice of cancellation will be given through Parity as soon as practicable following such cancellation. See "TERMS OF SALE –*Postponement or Cancellation of Sale*."

Notice of any change in the terms of the sale of the Bonds will be given through Parity by 4:00 p.m. California time the day before the sale. See "TERMS RELATING TO THE BONDS – *Adjustment of Principal Payments*" and "TERMS OF SALE – *Right to Modify or Amend*." As an accommodation to bidders, telephone, facsimile or electronic notice of any amendment or modification of this Official Notice of Sale will be given to any bidder requesting such notice from either of the Commission's financial advisors (the "Financial Advisors"):

Montague DeRose and Associates, LLC 2175 N. California Boulevard, Suite 745 Walnut Creek, California 94596 Attention: Chia Yang	Backstrom McCarley Berry & Co., LLC 115 Sansome Street, Mezzanine A San Francisco, California 94104 Attention: Vincent McCarley
Telephone: (925) 212-4889	Telephone: (415) 392-5505
Facsimile: (925) 256-9795	Facsimile: (415) 392-5276
E-mail: yang@montaguederose.com	E-mail: vmccarley@bmcbco.com

Subject to adjustment in accordance with this Official Notice of Sale.

Failure of any bidder to receive any such supplemental notice shall not affect the sufficiency of any required notice or the legality of the sale.

Bidders are directed to the Preliminary Official Statement of the Commission dated the date hereof with respect to the Bonds (the "Preliminary Official Statement") for additional information regarding the Commission, the Water Enterprise (as defined in the Preliminary Official Statement), the City and County of San Francisco (the "City"), the Bonds and the security therefor, and other matters. See "TERMS OF SALE – *Official Statement*" below.

This Official Notice of Sale will be submitted to Ipreo Prospectus ("Ipreo") for posting on its website (www.i-dealprospectus.com) and in the Parity bid delivery system. If any summary of the terms of the sale of the Bonds posted by Ipreo or Parity conflicts with this Official Notice of Sale in any respect, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

#### **TERMS RELATING TO THE BONDS**

THE AUTHORITY FOR ISSUANCE, PURPOSE, PRINCIPAL AND INTEREST REPAYMENT, SECURITY AND SOURCES OF PAYMENT, THE LEGAL OPINION AND ALL OTHER INFORMATION REGARDING THE BONDS ARE PRESENTED IN THE PRELIMINARY OFFICIAL STATEMENT, DATED MAY 10, 2012 (THE "PRELIMINARY OFFICIAL STATEMENT") WHICH EACH BIDDER IS DEEMED TO HAVE OBTAINED AND REVIEWED PRIOR TO BIDDING FOR THE BONDS. THIS OFFICIAL NOTICE OF SALE GOVERNS ONLY THE TERMS OF SALE, BIDDING, AWARD AND CLOSING PROCEDURES FOR THE BONDS. THE DESCRIPTION OF THE BONDS CONTAINED IN THIS OFFICIAL NOTICE OF SALE IS QUALIFIED IN ALL RESPECTS BY THE DESCRIPTION CONTAINED IN THE PRELIMINARY OFFICIAL STATEMENT.

Subject to the foregoing, the Bonds are generally described as follows:

*Authority for the Bonds*. The Commission is issuing the Bonds under the Charter of the City and under an Amended and Restated Indenture, dated as of August 1, 2002 (the "Original Indenture"), by and between the Commission and U.S. Bank National Association, as trustee (the "Trustee"), as amended and supplemented, and as further supplemented by a Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture"), by and between the Trustee and the Commission, a Seventeenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Indenture"), by and between the Trustee and the Commission, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Eighteenth Supplemental Indenture"), by and between the Trustee and the Commission, as amended and supplemental Indenture.

The purchaser of the Bonds is deemed to consent to certain amendments contained in the Fifth Supplemental Indenture by and between the Trustee and the Commission, dated as of June 1, 2010. See "INTRODUCTION – Amendments Effected by Fifth Supplemental Indenture" in the Preliminary Official Statement.

*Issue*. The Bonds are fully registered bonds without coupons in book-entry form in denominations of \$5,000 or any integral multiple thereof, as designated by the successful bidder thereof (the "Purchaser"), all dated the date of their original issuance. Potential bidders will be notified via Parity, not later than 4:00 p.m. (California time) on the business day prior to the

time prescribed for the receipt of bids, of any change to the principal payment schedule for the Bonds to be used for the bidding process. In addition, the Commission reserves the right, following the determination of the best bid for the Bonds, to adjust the actual principal payment schedule. See "TERMS RELATING TO THE BONDS – *Principal Payments*" and "– *Adjustment of Principal Payments*" below.

*Interest Rates*. Interest on the Bonds will be payable semiannually on May 1 and November 1 of each year, commencing November 1, 2012 (each, an "Interest Payment Date"). Interest on the Bonds will be calculated on the basis of a 360-day year consisting of twelve 30-day consecutive months.

Bidders must specify the rate or rates of interest which the Bonds for which they are bidding will bear; provided, that the following limitations apply:

(i) the maximum interest rate bid may not exceed 12% per annum;

(ii) each interest rate specified in any bid must be a multiple of 1/8 or 1/20 of 1% per annum and a zero rate of interest cannot be named;

(iii) each Bond shall bear interest from its date to its stated maturity date at the single rate of interest specified in the bid; and

(iv) all Bonds of a sub-series maturing at any one time shall bear the same rate of interest.

**Premium and Discount**. No bid offering to pay an amount less than 107 percent or more than 117 percent of the par value of the Bonds will be considered. Each maturity of the Bonds must be reoffered at a yield that will produce a price of not less than 98 percent.

**Principal Payments.** The Bonds maturing on November 1 in any or all years 2025 through 2032, both inclusive, shall be serial and/or term bonds, as specified by each bidder. The principal amount of Bonds maturing or subject to mandatory sinking fund redemption in any year shall be in integral multiples of \$5,000. For any term Bonds specified, the principal amount for a given year may be allocated only to a single term bond and must be part of an uninterrupted annual sequence from the first mandatory sinking fund payment to the term bond maturity.

An estimate of the principal payment schedule for the Bonds is set forth below.

Date (November 1)	Principal Payment <sup>*</sup>
2025	\$ 7,510,000
2026	7,815,000
2027	8,135,000
2028	8,550,000
2029	16,385,000
2030	17,255,000
2031	18,170,000
2032	10,360,000
	\$94,180,000

\* Preliminary, subject to change.

Information related to the principal payment schedule of the Bonds will be updated on Parity one day prior to the sale of the Bonds. See "*—Adjustment of Principal Payments*" below.

Adjustment of Principal Payments. The principal payment amounts set forth in this Official Notice of Sale reflect certain estimates of the Commission with respect to the likely interest rates of the winning bid and the premium contained in the winning bid. Potential bidders will be notified via Parity not later than 4:00 p.m. (California time) on the business day preceding the date then prescribed for the receipt of bids of any change to the principal payment schedule for the Bonds to be utilized for the bidding process. The Commission reserves the right to change the principal payment schedule set forth in this Official Notice of Sale for the Bonds after the determination of the winning bidder for the Bonds, by adjusting one or more principal payments of the Bonds in increments of \$5,000 by not more than 10% for any maturity in order to achieve its financing objectives; provided, however, that the aggregate principal amount of the Bonds shall not exceed \$103,595,000.\*

NO PURCHASER MAY WITHDRAW ANY BID OR CHANGE THE INTEREST RATES BID OR THE REOFFERING PRICES IN ITS REOFFERING PRICE CERTIFICATE AS A RESULT OF ANY CHANGE MADE TO THE PRINCIPAL PAYMENTS OF THE BONDS IN ACCORDANCE WITH THIS OFFICIAL NOTICE OF SALE. FURTHER, IF THE COMMISSION CHANGES THE PRINCIPAL PAYMENT SCHEDULE FOR THE BONDS AFTER THE RECEIPT OF BIDS, THE UNDERWRITER'S DISCOUNT, EXPRESSED IN DOLLARS PER THOUSAND DOLLAR OF BONDS, WILL BE HELD CONSTANT. THE COMMISSION WILL NOT BE RESPONSIBLE, IF AND TO THE EXTENT THAT, ANY ADJUSTMENT AFFECTS (i) THE NET COMPENSATION TO BE REALIZED BY THE PURCHASER OR (ii) THE TRUE INTEREST COST OF THE WINNING BID OR THE RANKING OF ANY BID RELATIVE TO OTHER BIDS.

**Redemption.**<sup>\*</sup> The Bonds maturing on or after November 1, 2022 shall be subject to redemption prior to their stated maturity, at the option of the Commission, from and to the extent of any source of available funds, as a whole or in part, on any date on or after May 1, 2022, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Tax Matters and Legal Opinions.* Upon delivery of the Bonds, Co-Bond Counsel, Sidley Austin LLP and Curls Bartling P.C., will deliver to the Commission opinions to the effect that based on existing statutes, regulations, rulings and judicial decisions and assuming compliance with certain covenants in the documents pertaining to the Bonds and requirements of the Internal Revenue Code of 1986, as amended, interest on the Bonds is not includable in the gross income of the owners of the Bonds for federal income tax purposes. In the further opinions of Co-Bond Counsel, interest on the Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals and corporations. Interest on the Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may, therefore, affect a corporation's alternative minimum tax liability. In the further opinions of Co-Bond Counsel, interest on the Bonds is exempt from personal income taxes imposed by the State of California. See "TAX MATTERS" in the Preliminary Official Statement.

<sup>\*</sup> Preliminary, subject to change. If revisions are made to the principal amortization schedule prior to the sale date, the not to exceed amount will be equal to 110% of the revised aggregate principal amount of the Bonds.

A complete copy of the proposed form of opinions of Co-Bond Counsel is set forth in Appendix F to the Preliminary Official Statement. A copy of the approving legal opinions of Sidley Austin LLP and Curls Bartling P.C., Co-Bond Counsel with respect to the Bonds, will be furnished to the Purchaser upon delivery of the Bonds. Copies of said opinions will be filed with the Depository Trust Company ("DTC") and with the City Treasurer.

# **TERMS OF SALE**

*Single Bid for the Bonds*. Each bid for the Bonds must be for all, and not less than all, of the Bonds hereby offered for sale, and for not less than the aggregate principal amount thereof, less any discount or plus any premium as permitted herein, as may be specified in the bid. All bids must be unconditional.

**Only Electronic Bids Through Parity Will Be Accepted**. Only electronic bids submitted through Parity will be accepted. All such bids must conform with the procedures established by Parity.

No bid will be accepted after the time specified for receiving bids. To the extent any instructions or directions set forth in Parity conflict with this Official Notice of Sale, the terms of this Official Notice of Sale shall control, unless a notice of an amendment to this Official Notice of Sale is given as described herein.

For further information about Parity, potential bidders may contact:

Ipreo Prospectus 1359 Broadway, 2nd Floor New York, New York 10018 Telephone: (212) 849-5021

See "TERMS OF SALE – Warning Regarding Electronic Bids."

THE COMMISSION RETAINS ABSOLUTE DISCRETION TO DETERMINE WHETHER ANY BID IS TIMELY AND COMPLETE AND CONFORMS TO THIS OFFICIAL NOTICE OF SALE. THE COMMISSION TAKES NO RESPONSIBILITY FOR INFORMING ANY BIDDER PRIOR TO THE TIME FOR RECEIVING BIDS THAT ANY BID IS INCOMPLETE OR NONCONFORMING OR HAS NOT BEEN RECEIVED.

*WARNING REGARDING ELECTRONIC BIDS*: THE COMMISSION WILL ACCEPT BIDS IN ELECTRONIC FORM SOLELY THROUGH PARITY ON THE OFFICIAL BID FORM CREATED FOR SUCH PURPOSE. EACH BIDDER SUBMITTING AN ELECTRONIC BID UNDERSTANDS AND AGREES BY DOING SO THAT IT IS SOLELY RESPONSIBLE FOR ALL ARRANGEMENTS WITH PARITY AND THAT PARITY IS NOT ACTING AS AN AGENT OF THE COMMISSION. INSTRUCTIONS AND FORMS FOR SUBMITTING ELECTRONIC BIDS MUST BE OBTAINED FROM PARITY AND THE COMMISSION ASSUMES NO RESPONSIBILITY FOR ENSURING OR VERIFYING BIDDER COMPLIANCE WITH THE PROCEDURES OF PARITY. THE COMMISSION SHALL ASSUME THAT ANY BID RECEIVED THROUGH PARITY HAS BEEN MADE BY A DULY AUTHORIZED AGENT OF THE BIDDER.

THE CITY, THE COMMISSION, THE CITY ATTORNEY, THE FINANCIAL ADVISORS AND CO-BOND COUNSEL ASSUME NO RESPONSIBILITY FOR ANY ERROR CONTAINED

IN ANY BID SUBMITTED ELECTRONICALLY, OR FOR FAILURE OF ANY BID TO BE TRANSMITTED, RECEIVED OR OPENED AT THE OFFICIAL TIME FOR RECEIPT OF BIDS. EACH BIDDER EXPRESSLY ASSUMES THE RISK OF ANY INCOMPLETE, ILLEGIBLE, UNTIMELY OR NONCONFORMING BID SUBMITTED BY ELECTRONIC TRANSMISSION BY SUCH BIDDER, INCLUDING WITHOUT LIMITATION, BY REASON OF GARBLED TRANSMISSIONS, MECHANICAL FAILURE, ENGAGED TELECOMMUNICATIONS LINES, OR ANY OTHER CAUSE ARISING FROM OR RELATING TO SUBMISSION BY ELECTRONIC TRANSMISSION. THE OFFICIAL TIME FOR RECEIPT OF BIDS WILL BE DETERMINED BY THE COMMISSION AT THE PLACE OF BID OPENING, AND THE COMMISSION SHALL NOT BE REQUIRED TO ACCEPT THE TIME KEPT BY PARITY AS THE OFFICIAL TIME.

Additional Terms and Conditions. By submitting a bid, each bidder thereby agrees to the following terms and conditions:

(1) if any provision in this Official Notice of Sale with respect to the Bonds conflicts with information or terms provided or required by Parity, this Official Notice of Sale, including any amendments or modifications issued through Parity, will control;

(2) each bidder will be solely responsible for making necessary arrangements to access Parity for purposes of submitting its bid in a timely manner and in compliance with the requirements of this Official Notice of Sale;

(3) neither the Commission nor the City will have any duty or obligation to provide or assure access to Parity to any bidder, and neither the Commission nor the City will be responsible for proper operation of, or have any liability for, any delays, interruptions or damages caused by use of Parity or any incomplete, inaccurate or untimely bid submitted by any bidder through Parity;

(4) the Commission is permitting use of Parity as a communication mechanism, and not as an agent of the Commission or the City, to facilitate the submission of electronic bids for the Bonds, Parity is acting as an independent contractor, and is not acting for or on behalf of the Commission or the City;

(5) neither the Commission nor the City is responsible for ensuring or verifying bidder compliance with any procedures established by Parity;

(6) the Commission may regard the electronic transmission of a bid through Parity (including information regarding the purchase price for the Bonds or the interest rates for any maturity of the Bonds) as though the information were physically submitted and executed on the bidder's behalf by a duly authorized signatory;

(7) if a bidder's bid is accepted by the Commission, such bid, this Official Notice of Sale and the information that is transmitted electronically through Parity will form a contract, and the bidder will be bound by the terms of such contract; and

(8) information provided by Parity to bidders will form no part of any bid or of any contract between the Purchaser and the Commission unless that information is included in this Official Notice of Sale or the bid of the Purchaser with respect to the winning bid. *Multiple Bids*. If multiple bids with respect to the Bonds are received from a single bidder, the Commission will have the right to accept the bid representing the lowest true interest cost ("TIC") to the Commission, and each bidder agrees by submitting any bid to be bound by such best bid.

*Good Faith Deposit*. A good faith deposit (a "Deposit") in the amount of \$940,000, payable to the order of the Commission, is required from the Purchaser subsequent to the award of the sale. The Purchaser is required to pay the Deposit to the Trustee, on behalf of the Commission, by wire transfer within two (2) hours after the Commission has communicated the acceptance of an award, using the following wire instructions:

Banking Institution:	U.S. BANK NATIONAL ASSOCIATION
Address:	One California Street, Suite 1000 San Francisco, California 94111
Contact & Telephone No:	Andrew Fung (415) 677-3593
FedWire Bank ABA:	091000022
ACH Bank ABA:	091000022
SWIFT Code:	USBKUS44 IMT
Bank Account No:	180121167365
For the Credit of:	U.S. Bank National Association
Other Beneficiary Information:	SFPUC Water 2012 Sub-Series C Bonds Good Faith Deposit

If the Deposit is not received by that time, the Commission may rescind the award of sale. No interest on the Deposit will accrue to the Purchaser. The Deposit will be applied to the purchase price of the Bonds. If the Purchaser fails to honor its accepted bid, the Deposit will be retained by the Commission as and for full liquidated damages.

If the Purchaser fails to provide the Reoffering Price Certificate, described below, by May 25, 2012, the Deposit will be retained by the Commission.

**Basis of Award**. Unless all bids with respect to the Bonds are rejected, as described below under "– *Right of Rejection and Waiver of Irregularity*," the Bonds will be awarded to the responsible bidder whose bid represents the lowest TIC to the Commission with respect to the Bonds prior to any change to the principal payment schedule in accordance with this Official Notice of Sale. The TIC will be that nominal annual interest rate which, when compounded semiannually using a 360-day year and used to discount to the dated date of the Bonds all payments of principal and interest payable on the Bonds, results in an amount equal to the purchase price of the Bonds to be received by the Commission. If two or more bidders offer bids for the Bonds at the same lowest TIC, the Commission will determine by lot which bidder will be awarded the Bonds. Bid evaluations or rankings made by Parity are not binding on the Commission.

*Estimate of True Interest Cost.* Each bidder is requested, but not required, to state in each bid the amount of interest payable on the Bonds during the life of the issue and the percentage TIC to the Commission (determined as described above), which will be considered as informative only and not binding on either the bidder or the Commission.

**Right of Rejection and Waiver of Irregularity**. The Commission reserves the right, in its sole and absolute discretion, to reject any and all bids for the Bonds, for any reason. The Commission also reserves the right to waive any irregularity or informality in any bid.

*Time of Award*. The Commission, acting through its General Manager or its Assistant General Manager/Chief Financial Officer, Business and Financial Services, or a designee of the General Manager, will take action awarding the Bonds or rejecting all bids not later than two (2) hours after the date and time at which bids with respect to the Bonds are received, unless such period for award is waived by the Purchaser. Prompt notice of the award will be given to the Purchaser.

**Confirmation of Bond Sizing**. As described herein under "TERMS RELATING TO THE BONDS – Adjustment of Principal Payments" the actual principal amount of the Bonds and the actual maturity schedule (or sinking account payment schedule for term bonds) for the Bonds may be changed by the Commission after the determination of the winning bid. Any such changes will be reported to the Purchaser by 7:00 p.m. (New York time) on the date and time the bids are received. Any such increase or decrease will be in \$5,000 increments with respect to each maturity date or sinking account payment date. If any such adjustment occurs, no rebidding or recalculation of the bids submitted will be required or permitted and no successful bid may be withdrawn. The Purchaser will not be permitted to change the interest rates in its bid. The dollar amount bid by the Purchaser will be adjusted to reflect any adjustments in the aggregate principal amount of the Bonds to be issued.

**Qualification for Sale; Compliance with Blue Sky Laws**. Compliance with Blue Sky and other securities laws and regulations, including the payment of any applicable fees, shall be the sole responsibility of the Purchaser. The Commission will furnish such information and take such action not inconsistent with law as the Purchaser may request and the Commission may deem necessary or appropriate to qualify the Bonds for offer and sale under the Blue Sky or other securities laws and regulations of such states and other jurisdictions of the United States of America as may be designated by the Purchaser; provided, however, that the Commission will not execute a general or special consent to service of process or qualify to do business in connection with such qualification or determination in any jurisdiction.

The Purchaser may not sell, offer to sell or solicit any offer to buy, the Bonds in any jurisdiction where it is unlawful for the Purchaser to make such sale, offer or solicitation, and the Purchaser shall comply with the Blue Sky and other securities laws and regulations of the states and jurisdictions in which the Purchaser sells the Bonds.

**Delivery and Payment**. Delivery of the Bonds, in the form of one certificate for each maturity, will be made to the Purchaser through the facilities of DTC in New York, New York, or at any other location mutually agreeable to both the Commission and the Purchaser, as soon as practicable. The anticipated date of delivery of the Bonds is June 7, 2012. Payment for the Bonds (including any premium) must be made by wire transfer in immediately available funds. Any expense for making payment in immediately available funds shall be borne by the Purchaser.

**Reoffering Price Certificate.** The Purchaser must reoffer all of the Bonds to the general public (excluding bond houses, brokers or similar persons or organizations acting in the capacity of underwriters or wholesalers). For this purpose, sales of Bonds to other securities brokers or dealers will not be considered sales to the general public.

Not later than the close of business on the third business day following the date on which the sale of the Bonds is awarded, the Purchaser must deliver to the Commission a certificate in the form attached hereto as <u>Exhibit A</u> (the "Reoffering Price Certificate").

The Purchaser will also be required to provide to the Commission and Co-Bond Counsel such additional information as may be requested by Co-Bond Counsel. If the Reoffering Price Certificate is sent by fax transmission, a hard copy must also be promptly sent by mail or courier service.

Failure to demonstrate compliance with this requirement with respect to the Bonds will constitute a default by the Purchaser, entitling the Commission to retain the Purchaser's Deposit even though in such event the Commission will not deliver the Bonds to the Purchaser.

# The Commission and the Financial Advisors will be relying on the indication of the reoffering prices set forth in the Reoffering Price Certificate in determining the arbitrage yield on the Bonds.

*No Litigation.* The Commission will deliver a certificate of the Commission with respect to the Bonds stating that no litigation is pending with service of process having been accomplished, or, to the knowledge of the officer of the Commission executing such certificate, threatened, concerning the validity of the Bonds, the existence of the Commission, or the title of the officers of the Commission who will execute the Bonds to their respective offices.

**CUSIP Numbers**. It is anticipated that CUSIP numbers will be printed on the Bonds and in the Official Statement, but neither the failure to print such numbers nor any error with respect thereto will constitute cause for a failure or refusal by the Purchaser to accept delivery of and pay for the Bonds in accordance with the terms of this Official Notice of Sale. The expenses associated with printing CUSIP numbers on the Bonds will be paid by the Commission; however, the CUSIP Service Bureau charge for the assignment of CUSIP numbers will be paid by the Purchaser. CUSIP data is provided by CUSIP Global Services, managed by Standard and Poor's Financial Services LLC on behalf of The American Bankers Association. CUSIP numbers will be provided for convenience of reference only. Neither the Commission nor the City will take any responsibility for the accuracy of such numbers.

*California Debt and Investment Advisory Commission Fee.* The attention of bidders is directed to California Government Code Section 8856, which provides that the Purchaser of the Bonds will be charged the California Debt and Investment Advisory Commission fee. The Purchaser is responsible for determining the actual fee due. The Commission expects the Purchaser to pay the applicable fee promptly upon receipt of the invoice.

*Certificate Regarding Official Statement*. At the time of delivery of the Bonds, the Purchaser will receive a certificate, signed by an officer of the Commission, confirming to the Purchaser that, to the best knowledge of said officer, the final Official Statement relating to the Bonds (the "Official Statement") (excluding information regarding underwriting, the municipal bond insurance policy or policies and the bond reserve surety bond and the provider or providers thereof, if any, and The Depository Trust Company and its book-entry only system, as to which no view will be expressed) as of the date of sale of the Bonds and as of the date of delivery thereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

*Official Statement*. Electronic copies of the Preliminary Official Statement prepared by the Commission will be furnished to any interested bidder upon request to the Financial Advisors. In accordance with Rule 15c2-12 of the Securities and Exchange Commission ("Rule 15c2-12"), the Commission deems such Preliminary Official Statement final as of its date, except for the omission of certain information permitted by Rule 15c2-12. Within seven (7) business days after the date of award of the Bonds, the Purchaser of the Bonds will be furnished with a reasonable number of copies (not to exceed 150) of the Official Statement, without charge. If the Purchaser requests additional copies of the Official Statement within two (2) days after the award of the Bonds, the Purchaser.

By making a bid for the Bonds, the bidder agrees, if awarded the Bonds, (i) to disseminate to all members of the underwriting syndicate, if any, copies of the Official Statement, including any supplements prepared by the Commission, and (ii) to take any and all other actions necessary to comply with applicable Securities and Exchange Commission and Municipal Securities Rulemaking Board rules governing the offering, sale and delivery of the Bonds to the ultimate purchasers, including without limitation the delivery of an Official Statement to each investor who purchases Bonds.

The form and content of the Official Statement of the Commission is within the sole discretion of the Commission. The Purchaser's name will not appear on the cover of the Official Statement.

*Continuing Disclosure*. In order to assist the Purchaser in complying with Securities and Exchange Commission Rule 15c2-12(b)(5), the Commission will undertake, pursuant to a Continuing Disclosure Certificate, to provide certain annual financial information and notices of the occurrence of certain events. A description of this undertaking and a form of the Continuing Disclosure Certificate are set forth in the Preliminary Official Statement and will also be set forth in the final Official Statement.

**Right to Modify or Amend.** The Commission reserves the right to modify or amend this Official Notice of Sale in any respect; provided, however, that any such modification or amendment will be communicated to potential bidders through Parity not later than 4:00 p.m. (California time) on the business day preceding the date for receiving bids. Failure of any potential bidder to receive notice of any modification or amendment will not affect the sufficiency of any such notice, the modification or amendment to which such notice relates, or the legality of the sale.

**Postponement or Cancellation of Sale**. The Commission reserves the right to postpone or cancel the sale of the Bonds at or prior to the time bids are to be received with respect to the Bonds. Notice of such postponement or cancellation will be given through Parity as soon as practicable following such postponement or cancellation. If the sale is postponed, notice of a new sale date will be given through Parity not later than 4:00 p.m. (California time) on the business day preceding the new sale date that bids are to be received. On any new sale date, any bidder may submit a bid for the purchase of the Bonds, which shall be in conformity in all respects with the provisions of this Official Notice of Sale except for the time or date and time of sale and any other changes announced through Parity.

Failure of any potential bidder to receive notice of cancellation or postponement shall not affect the sufficiency of any such notice, or affect the right of the Commission to cancel or postpone the sale. If a sale is postponed only, any subsequent bid submitted by a bidder with respect to such

sale will supersede any prior bid made. If a sale is cancelled, all bids with respect to such sale will be deemed cancelled.

*Equal Opportunity*. Pursuant to the spirit and intent of the City's Disadvantaged Business Enterprise ("DBE") Ordinance, Chapter 14A of the Administrative Code of the City, the Commission strongly encourages the inclusion of Disadvantaged Business Enterprises certified by the San Francisco Human Rights Commission on prospective proposing syndicate/teams. A list of certified DBEs can be obtained by contacting the San Francisco Human Rights Commission at 25 Van Ness Avenue, Room 800, San Francisco, California 94102, (415) 252-2500.

Dated: May 10, 2012

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# EXHIBIT A

# **REOFFERING PRICE CERTIFICATE**

# PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS 2012 SERIES ABC 2012 SUB-SERIES C (REFUNDING)

# (TO BE DELIVERED BY THE ORIGINAL PURCHASER AS DESCRIBED IN THE OFFICIAL NOTICE OF SALE UNDER "TERMS OF SALE – REOFFERING PRICE CERTIFICATE")

This Certificate is furnished by \_\_\_\_\_, as original purchaser (the "Original Purchaser") of \$\_\_\_\_\_\_ aggregate principal amount of the revenue bonds captioned above (the "**Bonds**"), to establish the initial offering price of said portion of the Bonds for purposes of determining the "issue price" of the Bonds within the meaning of Section 1273 of the Internal Revenue Code of 1986, as amended (the "**Code**").

The Original Purchaser DOES HEREBY CERTIFY as follows:

1. The Original Purchaser made a bona fide offering, beginning on \_\_\_\_\_\_, 2012, the date on which the Original Purchaser agreed to purchase the Bonds (the "Sale Date"), of all of the Bonds of each maturity to the General Public (hereinafter defined) at their respective initial offering prices, as set forth in Exhibit \_\_\_\_ hereto (each, an "Initial Public Offering Price"), and reasonably expected on the Sale Date to sell the Bonds of each maturity to the General Public Offering Prices.

2. The aggregate of the Initial Public Offering Prices is \$\_\_\_\_\_\_ (representing \$\_\_\_\_\_\_ aggregate principal amount of the Bonds, [plus] [minus] [net] original issue [premium] [discount] of \$\_\_\_\_\_\_).

3. [Except for Bonds maturing on \_\_\_\_\_, 20\_\_, \_\_\_\_, 20\_\_, and \_\_\_\_, 20\_\_ (the "**Undersold Bonds**"), with] [With] respect to each maturity of the Bonds, the Original Purchaser first sold for cash at least 10% of the aggregate principal amount of the Bonds to the General Public at their Initial Public Offering Price.

[4.] With respect to [each maturity of] the Undersold Bonds, despite the reasonable expectation of the Original Purchaser to sell the Bonds at their [respective] Initial Public Offering Price[s], the Original Purchaser did not sell at least 10% of the Bonds [of the maturity] to the General Public at their [respective] Initial Public Offering Price[s]. [PROVIDE EXPLANATION].<sup>‡</sup>

[4.] [5.] For purposes of this Certificate, the term "**General Public**" excludes bond houses, brokers and similar persons or organizations acting in the capacity of underwriters or wholesalers.

<sup>&</sup>lt;sup>‡</sup> For any maturity of Undersold Bonds, the successful bidder will be required to supply an explanation, satisfactory to the issuer, as to why the successful bidder did not sell at least 10% of each such maturity.

Nothing herein represents the Original Purchaser's interpretation of any laws, and in particular, regulations under Section 148 of the Code.

Capitalized terms used herein and not otherwise defined have the meanings ascribed thereto in the Amended and Restated Indenture dated as of August 1, 2002, by and between the Commission and U.S. Bank National Association, as amended and supplemented to date.

Dated: \_\_\_\_\_, 2012

[NAME OF UNDERWRITER]

By: \_\_\_\_\_\_[NAME] [TITLE]

# **EXHIBIT 1 TO REOFFERING PRICE CERTIFICATE**

Maturity Date (November 1) Principal <u>Amount</u>

Interest <u>Rate</u>

Yield

Reoffering Price\* %

\* Stated as a percentage of par.

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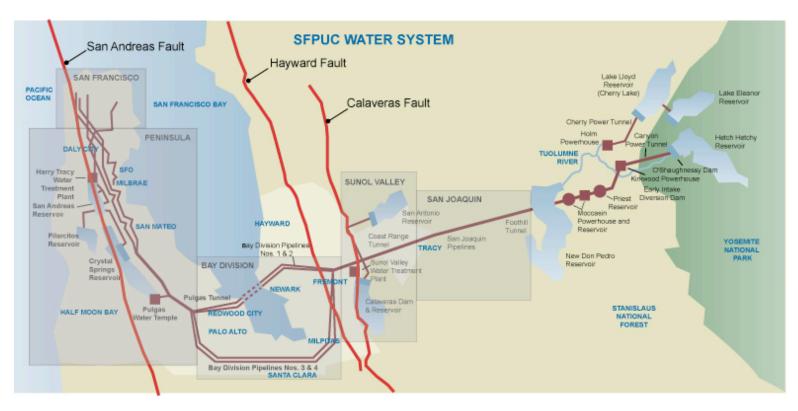


Figure 1-1 (Not to Scale) – The above map depicts the Hetch Hetchy Regional Water System. For further description of the SFPUC's Water System, see "THE WATER ENTERPRISE."

The 2012 Series ABC Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the SFPUC or any of its income or receipts, except Revenues. See "SECURITY FOR THE BONDS."

#### **GENERAL INFORMATION**

No dealer, broker, salesperson or other person has been authorized by the SFPUC to give any information or to make any representation other than those contained herein and, if given or made, such other information or representation must not be relied upon as having been authorized by the SFPUC.

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 2012 Series ABC Bonds, by any 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 initial purchasers of the 2012 Series ABC Bonds. Any statement made in this Official Statement involving any forecast or matter of estimates or opinion, whether or not expressly so stated, is intended solely as such and not as a representation of fact.

The information set forth herein other than that provided by the SFPUC, although obtained from sources which are believed to be reliable, is not guaranteed as to accuracy or completeness. The information and expressions of opinion herein are subject to change without notice and neither 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 SFPUC or the City since the date hereof.

The City maintains a website at http://www.sfgov.org and the SFPUC maintains a website at http://www.sfwater.org. In addition, certain information and reports found on other websites, and other information and reports, are referred to in this Official Statement. *The information and reports available on such websites, and the other referenced information and reports, are not incorporated by reference into this Official Statement and should not be relied upon in making an investment in the 2012 Series ABC Bonds.* 

The issuance and sale of the 2012 Series ABC Bonds have not been registered under the Securities Act of 1933 in reliance upon the exemption provided thereunder by Section  $3(a)^2$  for the issuance and sale of municipal securities.

IN CONNECTION WITH THE OFFERING OF THE 2012 SERIES ABC BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2012 SERIES ABC BONDS AT LEVELS ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

This Official Statement is delivered for use in connection with the issuance, sale and delivery of the 2012 Series ABC Bonds and may not be reproduced or used, in whole or in part, for any other purpose.

#### FORWARD-LOOKING STATEMENTS

CERTAIN STATEMENTS CONTAINED IN THIS OFFICIAL STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND "FORWARD-LOOKING STATEMENTS." ALL FORWARD-LOOKING STATEMENTS ARE PREDICTIONS AND ARE SUBJECT TO KNOWN AND UNKNOWN RISKS AND UNCERTAINTIES. 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. GIVEN THEIR UNCERTAINTY, INVESTORS ARE CAUTIONED NOT TO PLACE UNDUE RELIANCE ON SUCH STATEMENTS.

#### SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Anson Moran, President Art Torres, Vice President Ann Moller Caen, Commissioner Francesca Vietor, Commissioner Vince Courtney, Commissioner

#### PUBLIC UTILITIES COMMISSION OFFICIALS

Edward M. Harrington, General Manager Michael Carlin, Deputy General Manager and Chief Operating Officer Todd L. Rydstrom, Assistant General Manager, Business Services and Chief Financial Officer Steven R. Ritchie, Assistant General Manager, Water Enterprise Juliet Ellis, Assistant General Manager, External Affairs Barbara Hale, Assistant General Manager, Power Enterprise Harlan Kelly, Jr., Assistant General Manager, Wastewater Enterprise

#### CITY AND COUNTY OF SAN FRANCISCO MAYOR

Edwin M. Lee

**BOARD OF SUPERVISORS** 

David Chiu, Board President, District 3

John Avalos, District 11 David Campos, District 9 Malia Cohen, District 10 Carmen Chu, District 4 Sean Elsbernd, District 7 Mark Farrell, District 2 Jane Kim. District 6 Eric Mar, District 1 Christina Olague, District 5 Scott Wiener, District 8

#### CITY ATTORNEY

Dennis J. Herrera

#### CITY TREASURER

José Cisneros

#### **OTHER CITY AND COUNTY OFFICIALS**

Benjamin Rosenfield, Controller Naomi Kelly, City Administrator

#### SPECIAL SERVICES

Co-Bond Counsel Sidley Austin LLP San Francisco, California Curls Bartling P.C. Oakland, California

Disclosure Counsel Jones Hall, A Professional Law Corporation San Francisco, California Co-Financial Advisors Montague DeRose and Associates, LLC Walnut Creek, California Backstrom McCarley Berry & Co., LLC San Francisco, California

> Trustee U.S. Bank National Association San Francisco, California

Verification Agent Causey, Demgen & Moore, Inc., Certified Public Accountants, Denver, Colorado (THIS PAGE INTENTIONALLY LEFT BLANK)

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#### APPENDIX A SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

APPENDIX B	SUMMARIES OF CERTAIN LOCAL INITIATIVES	
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- APPENDIX D WATER SYSTEM IMPROVEMENT PROGRAM
- APPENDIX E SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS
- APPENDIX F PROPOSED FORM OF OPINION OF CO-BOND COUNSEL
- APPENDIX G FORM OF CONTINUING DISCLOSURE CERTIFICATE
- APPENDIX H SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM

#### **OFFICIAL STATEMENT**

## \$686,040,000<sup>\*</sup> PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS, 2012 SERIES ABC

\$575,710,000\* 2012 Sub-Series A Bonds (WSIP) \$16,150,000\* 2012 Sub-Series B Bonds (Prop. A Reimbursement) \$94,180,000\* 2012 Sub-Series C Bonds (Refunding)

#### **INTRODUCTION**

This Introduction is qualified in its entirety by reference to the more detailed information included and referred to elsewhere in this Official Statement. The offering of the 2012 Series ABC Bonds to potential investors is made only by means of the entire Official Statement. Terms used in this Introduction and not otherwise defined have the respective meanings assigned to them elsewhere in this Official Statement, including "APPENDIX A— SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

#### General

This Official Statement, including the cover page and Appendices hereto, is provided to furnish certain information in connection with the offering by the Public Utilities Commission of the City and County of San Francisco (the "SFPUC") of the water revenue bonds captioned above (the "2012 Sub-Series A Bonds," the "2012 Sub-Series B Bonds," the "2012 Sub-Series C Bonds," each being referred to as a "Sub-series" and, collectively, the "2012 Series ABC Bonds").

#### **Authority for Issuance**

The SFPUC is issuing the 2012 Series ABC Bonds pursuant to authority granted by the Charter (the "Charter") of the City and County of San Francisco (the "City"), through Proposition A, approved by the voters of the City on November 5, 2002 ("Proposition A"), and Proposition E, approved by the voters of the City on November 5, 2002 ("Proposition E").

The 2012 Sub-Series A Bonds will be issued under a Sixteenth Supplemental Indenture (the "Sixteenth Supplemental Indenture"), the 2012 Sub-Series B Bonds will be issued under a Seventeenth Supplemental Indenture (the "Seventeenth Supplemental Indenture"), and the 2012 Sub-Series C Bonds will be issued under an Eighteenth Supplemental Indenture (the "Eighteenth Supplemental Indenture"), each dated as of June 1, 2012, by and between the SFPUC and U.S. Bank National Association, as trustee (the "Trustee"), and each of which supplements the Amended and Restated Indenture, dated as of August 1, 2002, by and between the SFPUC and the Trustee (as supplemented and amended to date, the "Indenture").

The 2012 Series ABC Bonds are being issued under a resolution adopted by the SFPUC governing body (the "Commission") on March 27, 2012, and under a resolution adopted by the Board of Supervisors of the City (the "Board of Supervisors") on May 1, 2012.

<sup>&</sup>lt;sup>\*</sup> Preliminary; subject to change.

See "OBLIGATIONS PAYABLE FROM REVENUES – Authority for Issuance of Revenue Bonds and Other Obligations Payable from Revenues."

#### Purposes

The 2012 Sub-Series A Bonds are primarily being issued to finance a portion of the design, acquisition and construction of various capital projects of benefit to the SFPUC's municipal water supply, storage and distribution system (the "Water Enterprise"), specifically, a portion of the SFPUC's Water System Improvement Program ("WSIP"). Proceeds of the 2012 Sub-Series A Bonds will also be applied to fund capitalized interest on that Sub-series of Bonds for a limited period.

The 2012 Sub-Series B Bonds are primarily being issued to reimburse the Commission for costs to settle litigation arising out of certain capital projects of benefit to the SFPUC's Water Enterprise.

The 2012 Sub-Series C Bonds are primarily being issued to refund and defease the outstanding bond issues of the SFPUC captioned "\$140,000,000 Public Utilities Commission of the City and County of San Francisco, San Francisco Water Revenue Bonds, 2001 Series A" (the "2001 Series A Bonds") and "\$164,000,000 Public Utilities Commission of the City and County of San Francisco, San Francisco Water Revenue Bonds, 2002 Series A" (the "2002 Series A Bonds").

Proceeds of the 2012 Series ABC Bonds will also be applied to fund a combined debt service reserve account for the 2012 Series ABC Bonds, and to pay the costs of issuance of the 2012 Series ABC Bonds.

See "PLAN OF FINANCE," "WATER SYSTEM IMPROVEMENT PROGRAM," and "APPENDIX D – WATER SYSTEM IMPROVEMENT PROGRAM."

#### The SFPUC and the Water Enterprise

The SFPUC is a department of the City responsible for the maintenance, operation and development of three utility enterprises. See "THE PUBLIC UTILITIES COMMISSION."

The SFPUC owns and operates a municipal water supply, storage and distribution system (the "Water Enterprise") that provides drinking water to retail customers in the City and certain retail customers outside of the City (the "Retail Customers") and to wholesale customers in three other San Francisco Bay Area counties (the "Wholesale Customers"). The Water Enterprise consists of water treatment and distribution facilities located outside of the City (the "Regional Water System") and water treatment and distribution facilities located inside the City (the "In-City Distribution System"). See "WATER FACILITIES."

Water rates for Retail Customers are set by the SFPUC, subject to rejection by resolution of the Board of Supervisors. Water rates for Wholesale Customers are set pursuant to the Water Supply Agreement, which became effective in July 2009 (the "Water Supply Agreement"), between the City and the Wholesale Customers. See "FINANCIAL OPERATIONS."

The other two enterprises of the SFPUC provide wastewater services to customers in the City and power, mainly hydroelectric, for City government operations and to other users. The revenues of these other two enterprises are not available for, and do not secure, payment of the principal, of premium, if any, or interest on the Bonds. See "THE PUBLIC UTILITIES COMMISSION."

#### **Security for the Bonds**

Under the Indenture, the SFPUC has irrevocably pledged the Revenues of its Water Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of any parity revenue bonds issued under the Indenture, including the 2012 Series ABC Bonds, subject to the allocation of funds provided in the Indenture. The 2012 Series ABC Bonds and all other Bonds are secured by a parity lien on Revenues.

The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the 2012 Series ABC Bonds from any source of funds other than Revenues (as defined in the Indenture). The SFPUC has no taxing power. The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds. The 2012 Series ABC Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the SFPUC or any of its income or receipts, except Revenues.

See "SECURITY FOR THE BONDS."

#### **Debt Service Coverage**

The Indenture provides that the SFPUC will, at all times while any of the Bonds remain Outstanding, establish, fix, prescribe and collect rates, fees and charges in connection with the water, services and facilities furnished by the Water Enterprise so as to yield Net Revenues for the twelve months following the date of calculation, which (together with any fund balances of the SFPUC or the Water Enterprise available for payment of Debt Service and not budgeted to be expended during such twelve months but excluding the Bond Reserve Fund and Rebate Fund) are equal to at least 1.25 times Annual Debt Service for such 12-month period, but from such Debt Service excluding any funded interest. See "SECURITY FOR THE BONDS – Rate Covenants."

*Historical Debt Service Coverage*. The following table contains a summary of historical debt service coverage for the Bonds. The calculation of debt service coverage includes net operating income and funds not budgeted to be spent in the next twelve months and legally available to pay debt service, as permitted under the Indenture.

#### Historical Coverage Calculation (in thousands)

	2006-07	2007-08	2008-09	2009-10	2010-11
Net Revenue per Indenture	\$ 93,813	\$ 92,704	\$ 82,978	\$ 77,735	\$ 125,747
Other Available Funds	56,868	65,344	66,779	60,951	44,130
Funds Available for Debt Service	\$150,681	\$158,048	\$149,757	\$138,686	169,877
Debt Service	\$ 65,115	\$ 64,193	\$ 69,585	\$ 69,621	\$ 86,554
Debt Service Coverage	2.31x	2.46x	2.15x	1.99x	1.96x

For a more complete summary of the historical operating results of the Water Enterprise, see "HISTORICAL OPERATING RESULTS—Summary of Historical Operating Results and Debt Service Coverage" and "APPENDIX E—SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS."

**Projected Debt Service Coverage**. The following table presents a summary of projected debt service coverage for the Bonds. These projections are based on an analysis of historic trends, adjusted where appropriate for known or anticipated changes in operations. The projections are also based on the assumptions that all rate increases necessary to finance the WSIP will be obtained. Retail rate increases have been adopted through June 30, 2014. Wholesale rates are adopted annually pursuant to the Water Supply Agreement. See "FINANCIAL OPERATIONS—Wholesale Water Sales Revenue" and "—Retail Water Sales Revenue."

## Projected Coverage Calculation\* (in thousands)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Net Operating Revenue	\$169,788	\$183,811	\$214,135	\$326,181	\$323,189	\$346,227
Beginning Fund Balance	22,400	35,326	43,372	29,967	48,688	25,652
Funds Available for Debt Service	192,188	219,137	257,508	356,149	371,878	371,879
Debt Service	128,300	143,047	178,603	243,658	259,606	284,068
Debt Service Coverage	1.50 x	1.53 x	1.44 x	1.46 x	1.43 x	1.31 x

\* Preliminary; subject to change.

Amounts set forth in this table are projections. For a more complete summary of the assumptions on which these projections are based, see "PROJECTED OPERATING RESULTS." Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

#### **Bond Reserve Accounts**

For Bonds issued prior to the Effective Date of certain provisions of the Fifth Supplemental Indenture (as such terms are hereinafter defined), the Indenture establishes the Bond Reserve Fund and requires the establishment of a bond reserve account (each, a "Bond Reserve Account") within the Bond Reserve Fund for each Series of Bonds issued under the Indenture, and requires the deposit in each Bond Reserve Account of an amount equal to the Required Reserve for the related Series of Bonds. Each Bond Reserve Account is available only for the payment of debt service on the Series of Bonds for which such Bond Reserve Account was established. For any Series of Additional Bonds issued on or after such Effective Date, the Required Reserve will be the amount, if any, required to be deposited into a Reserve Account for such Series of Bonds as set forth in the Supplemental Indenture pursuant to which such Series of Additional Bonds is issued. See "SECURITY FOR THE BONDS – Bond Reserve Account."

Pursuant to the Indenture, the Required Reserve for any Series of Bonds may be funded through a Bond Reserve Fund Policy, which is a policy of insurance or surety bond issued by a Municipal Bond Insurer, or a letter of credit issued by a Qualified Bank. See "SECURITY FOR THE BONDS – Bond Reserve Account" and "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

#### **Outstanding and Future Parity Bonds**

The SFPUC has previously issued revenue bonds, and in the future expects to issue additional bonds, pursuant to the Indenture and secured by Revenues of the Water Enterprise on parity with the 2012 Series ABC Bonds. The 2012 Series ABC Bonds and all other bonds issued pursuant to the Indenture are referred to collectively in this Official Statement as the "Bonds." See "OBLIGATIONS PAYABLE FROM REVENUES."

The Indenture provides that Additional Series of Bonds secured by Revenues on parity with the Outstanding Bonds and the 2012 Series ABC Bonds (each an "Additional Series of Bonds") may be issued if certain conditions are met. See "SECURITY FOR THE BONDS – Additional Series of Bonds."

Following the issuance of the 2012 Series ABC Bonds, the SFPUC anticipates that it will issue the next Series of Bonds to fund the WSIP in Fiscal Year 2013-14 in an aggregate principal amount of approximately \$553 million. The SFPUC may also issue refunding bonds from time to time in response to market conditions in order to achieve debt service savings. See "FINANCING OF THE WATER SYSTEM IMPROVEMENT PROGRAM."

#### Amendments Effected by Fifth Supplemental Indenture

The SFPUC entered into a Fifth Supplemental Indenture, dated as of June 1, 2010 (the "Fifth Supplemental Indenture"), amending and supplementing certain provisions of the Indenture, including provisions relating to Debt Service Coverage, Bond Reserve Requirements, the conditions for issuing Additional Series of Bonds, deposits into certain funds established under the Indenture, and the treatment of "Refundable Credits" received with respect to

any bonds issued as "Build America Bonds" under Section 54AA of the Internal Revenue Code of 1986, as amended, or any future Code provisions that create a substantially similar direct-pay subsidy program. See "SECURITY FOR THE BONDS" and "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture" for a more detailed explanation of the amendments effected by the Fifth Supplemental Indenture.

The provisions of the Fifth Supplemental Indenture become effective only at such time as the written consents thereto of the Owners of a majority in aggregate amount of the Bond Obligation of the Bonds then Outstanding and of each Credit Provider have been filed with the Trustee, and certain other requirements contained in the Indenture have been satisfied. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Modification or Amendment of the Indenture." Provisions of the Fifth Supplemental Indenture may become effective independently of each other on separate dates. The term "Effective Date" refers to each date on which one or more of the respective provisions of the Fifth Supplemental Indenture becomes effective pursuant to the terms of the Indenture. By their purchase of 2012 Series ABC Bonds, the purchasers of 2012 Series ABC Bonds irrevocably consent to all the provisions of the Fifth Supplemental Indenture. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture. Amendments to Indenture."

Upon the issuance of the 2011 Series ABCD Bonds, the provisions of the Fifth Supplemental Indenture that permit Refundable Credits to be taken into account as an offset to debt service in calculating Maximum Annual Debt Service and Annual Debt Service (thus affecting the additional bonds test, the rate covenant and the sizing of the Bond Reserve Account) under the Indenture became effective. See "APPENDIX A- SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE–Fifth Supplemental Indenture–Amendments to Indenture." The other provisions of the Fifth Supplemental Indenture will not become effective until consents have been received from the Credit Providers.

#### **Historical and Projected Operating Results**

The results of operations of the Water Enterprise for the last five fiscal years are summarized herein under "HISTORICAL OPERATING RESULTS." Projected operating results for the Water Enterprise for the current and next five fiscal years are presented under "PROJECTED OPERATING RESULTS." Actual results may differ materially from such projections. See "FORWARD-LOOKING STATEMENTS" above.

#### **Risk Factors**

Investment in the 2012 Series ABC Bonds is subject to material risks. For a general overview of certain risk factors which should be considered, in addition to other matters set forth in this Official Statement, in evaluating an investment in the 2012 Series ABC Bonds, see "RISK FACTORS."

#### **Continuing Disclosure**

The SFPUC has covenanted for the benefit of the owners and beneficial owners of the 2012 Series ABC Bonds to provide certain financial information and operating data not later than nine months following the end of its Fiscal Year (presently June 30), beginning on March 31, 2013, with the report for Fiscal Year 2011-12, and to provide notices of the occurrence of certain enumerated events, including the respective Effective Dates of provisions of the Fifth Supplemental Indenture. These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the "Rule"). See "CONTINUING DISCLOSURE" and "APPENDIX G–FORM OF CONTINUING DISCLOSURE CERTIFICATE." The SFPUC has never failed to comply in all material respects with its prior continuing disclosure undertakings under the Rule.

#### **Other Matters**

Brief descriptions of the 2012 Series ABC Bonds, the security and sources of payment for the 2012 Series ABC Bonds, the SFPUC, the Water Enterprise, the WSIP and certain non-WSIP capital improvements are provided herein. Such descriptions do not purport to be comprehensive or definitive. Definitions of certain capitalized terms

used herein may be found in "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE." All references made to various documents herein are qualified in their entirety by reference to the forms thereof, all of which are available for inspection at the office of the SFPUC at:

San Francisco Public Utilities Commission 1155 Market, 11th Floor San Francisco, CA 94103 Attention: Assistant General Manager, Business Services and Chief Financial Officer (415) 554-3155

#### THE 2012 SERIES ABC BONDS

## General

The 2012 Series ABC Bonds will be dated as of their date of delivery and will accrue interest from their date of delivery at the rates per annum set forth on the inside cover page of this Official Statement. Interest on the 2012 Series ABC Bonds is payable on May 1 and November 1 of each year, beginning November 1, 2012. Interest on the 2012 Series ABC Bonds will be calculated on the basis of a 360-day year composed of twelve 30-day months.

The 2012 Series ABC Bonds will mature on the dates and in the principal amounts set forth on the inside cover page of this Official Statement. The 2012 Series ABC Bonds will be issued in fully registered form in denominations of \$5,000 or any integral multiple of \$5,000.

#### **Book-Entry System**

The 2012 Series ABC Bonds will be registered in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"), New York, New York, as the Owner of the 2012 Series ABC Bonds.

So long as DTC, or its nominee, Cede & Co., is the Owner of the 2012 Series ABC Bonds, all payments on the 2012 Series ABC Bonds will be made directly to DTC. Disbursement of such payments to the DTC Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners of the 2012 Series ABC Bonds will be the responsibility of the DTC Participants. See "APPENDIX H—SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM."

### Redemption—2012 Sub-Series A Bonds\*

*Optional Redemption of 2012 Sub-Series A Bonds*. The 2012 Sub-Series A Bonds maturing prior to November 1, 20\_\_\_ are not subject to redemption prior to their stated maturity dates.

The 2012 Sub-Series A Bonds maturing on November 1, 20\_ are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to the extent of any source of available funds, as a whole or in part, on any date on or after November 1, 20\_, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the 2012 Sub-Series A Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Mandatory Sinking Fund Redemption of 2012 Sub-Series A Bonds*. The 2012 Sub-Series A Bonds maturing on November 1, 20\_\_ (the "20\_\_ Sub-Series A Term Bonds"), are further subject to redemption prior to their stated maturity, from 2012 Sub-Series A Sinking Fund Account payments on any November 1 on or after November 1, 20\_\_, by lot within any such maturity if less than all of the 2012 Sub-Series A Bonds of such maturity and tenor be redeemed, upon payment of the principal amount thereof and accrued interest thereon to the date fixed for redemption, without premium.

<sup>\*</sup> Preliminary; subject to change.

The 20\_\_\_Sub-Series A Term Bonds are subject to mandatory redemption as follows:

Redemption Date	Principal
(November 1)	Amount

#### Maturity

#### **Redemption**—2012 Sub-Series B Bonds<sup>\*</sup>

*Optional Redemption of 2012 Sub-Series B Bonds*. The 2012 Sub-Series B Bonds maturing prior to November 1, 20\_\_\_ are not subject to redemption prior to their stated maturity dates.

The 2012 Sub-Series B Bonds maturing on November 1, 20\_\_\_ are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to the extent of any source of available funds, as a whole or in part on any date on or after November 1, 20\_\_, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the 2012 Sub-Series B Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Mandatory Sinking Fund Redemption of 2012 Sub-Series B Bonds*. The 2012 Sub-Series B Bonds maturing on November 1, 20\_\_ (the "20\_\_ Sub-Series B Term Bonds"), are further subject to redemption prior to their stated maturity, from 2012 Sub-Series B Sinking Fund Account payments on any November 1 on or after November 1, 20\_\_, by lot within any such maturity if less than all of the 2012 Sub-Series B Bonds of such maturity and tenor be redeemed, upon payment of the principal amount thereof and accrued interest thereon to the date fixed for redemption, without premium.

The 20\_\_\_Sub-Series B Term Bonds are subject to mandatory redemption as follows:

Redemption Date	Principal
(November 1)	Amount

Maturity

<sup>&</sup>lt;sup>\*</sup> Preliminary; subject to change.

# **Redemption—2012 Sub-Series C Bonds**<sup>\*</sup>

*Optional Redemption of 2012 Sub-Series C Bonds*. The 2012 Sub-Series C Bonds maturing prior to November 1, 20 are not subject to redemption prior to their stated maturity dates.

The 2012 Sub-Series C Bonds maturing on November 1, 20\_\_\_ are subject to redemption prior to their stated maturity, at the option of the SFPUC, from and to the extent of any source of available funds, as a whole or in part on any date on or after November 1, 20\_\_, and if in part by lot within such maturity, at a redemption price equal to 100% of the principal amount of the 2012 Sub-Series C Bonds to be redeemed, plus accrued interest thereon to the date fixed for redemption, without premium.

*Mandatory Sinking Fund Redemption of 2012 Sub-Series C Bonds.* The 2012 Sub-Series C Bonds maturing on November 1, 20\_\_ (the "20\_\_ Sub-Series C Term Bonds"), are further subject to redemption prior to their stated maturity, from 2012 Sub-Series C Sinking Fund Account payments on any November 1 on or after November 1, 20\_\_, by lot within any such maturity if less than all of the 2012 Sub-Series C Bonds of such maturity and tenor be redeemed, upon payment of the principal amount thereof and accrued interest thereon to the date fixed for redemption, without premium.

The 20\_\_\_Sub-Series C Term Bonds are subject to mandatory redemption as follows:

Redemption Date	Principal
(November 1)	Amount

#### Maturity

#### **General Terms Regarding Redemption**

**Purchase In Lieu of Redemption.** In lieu of optional or mandatory sinking fund redemption of the 2012 Series ABC Bonds of any one series as described above, the SFPUC may purchase such 2012 Series ABC Bonds at public or private sale as and when and at such prices (including brokerage and other charges and including accrued interest) as the SFPUC may in its discretion determine. The par amount of any such 2012 Series ABC Bonds purchased by the SFPUC in any twelve-month period ending on September 1 in any year will be credited towards and will reduce the par amount of such 2012 Series ABC Bonds, required to be redeemed as described above on the next succeeding November 1.

Selection of 2012 Series ABC Bonds for Redemption. Subject to DTC's procedures relating to the selection of bonds for redemption (see "APPENDIX H–SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM"), whenever less than all of the 2012 Series ABC Bonds of any one series, subseries and maturity are called for redemption and those 2012 Series ABC Bonds are redeemable by lot, the Trustee will select the 2012 Series ABC Bonds of that series, subseries and maturity to be redeemed from the Outstanding 2012 Series ABC Bonds of that series, subseries and maturity, by lot or by any other manner the Trustee deems fair and equitable. For purposes of such selection, 2012 Series ABC Bonds will be deemed to be made up of \$5,000 portions of principal, any of which may be redeemed separately.

<sup>&</sup>lt;sup>\*</sup> Preliminary; subject to change.

*Notice of Redemption*. Notice of redemption will be mailed by the Trustee at least 30 days but not more than 60 days prior to the redemption date, to DTC (so long as the DTC Book-Entry System is used). The actual receipt by the owner of any 2012 Series ABC Bond of notice of such redemption is not a condition precedent to redemption, and failure to receive a redemption notice or any defect in a redemption notice will not affect the validity of the proceedings for the redemption of such 2012 Series ABC Bonds or the cessation of the accrual of interest on the date fixed for such redemption. See "APPENDIX H–SECURITIES DEPOSITORY AND THE BOOK-ENTRY SYSTEM."

**Rescission of Notice of Redemption**. The SFPUC may, at its option, prior to the date fixed for redemption in any notice of optional redemption, rescind and cancel such notice of redemption by written request to the Trustee and the Trustee will mail notice of such cancellation to the recipients of the notice of redemption being cancelled.

*Effect of Redemption*. When notice of redemption has been duly given as described above, and moneys for payment of the redemption price are held by the Trustee, the 2012 Series ABC Bonds called for redemption will, on the redemption date designated in such notice, become due and payable at the redemption price specified in such notice; and from and after the date so designated interest on the 2012 Series ABC Bonds called for redemption will cease to accrue, and such 2012 Series ABC Bonds will cease to be entitled to any benefit or security under the Indenture, and the Owners of said 2012 Series ABC Bonds will have no rights in respect thereof except to receive payment of the redemption price thereof. The Trustee, upon surrender for payment of any of said 2012 Series ABC Bonds, will pay such 2012 Series ABC Bonds at the redemption price, together with accrued interest thereon. All 2012 Series ABC Bonds redeemed will be cancelled upon surrender and no 2012 Series ABC Bonds will be issued in place thereof.

#### PLAN OF FINANCE

#### **Capital Projects and Costs**

**2012** Sub-Series A Bonds. The 2012 Sub-Series A Bonds are being issued to finance a portion of the design, acquisition and construction of various capital projects in furtherance of the WSIP. The WSIP is a multibillion dollar, multi-year capital program to upgrade the SFPUC's regional and local drinking water systems. A portion of the proceeds of the 2012 Sub-Series A Bonds will be applied to fund a portion of the WSIP. See "ESTIMATED SOURCES AND USES OF FUNDS," "WATER SYSTEM IMPROVEMENT PROGRAM" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

*2012 Sub-Series B Bonds.* The 2012 Sub-Series B Bonds are being issued to reimburse the Commission for costs to settle litigation arising out of certain capital projects of benefit to the SFPUC's Water Enterprise. See "ESTIMATED SOURCES AND USES OF FUNDS."

#### **Refunding Plan**<sup>\*</sup>

*General.* The SFPUC will apply a portion of the proceeds from the sale of the 2012 Sub-Series C Bonds to establish an irrevocable escrow to refund and legally defease all of the outstanding 2001 Series A Bonds and the outstanding 2002 Series A Bonds maturing on and after November 1, 2013 (collectively, the "Refunded Prior Bonds"), as described below. The 2001 Series A Bonds are currently outstanding in the principal amount of \$25,600,000, and the 2002 Series A Bonds are currently outstanding in the principal amount of \$77,365,000. See "OBLIGATIONS PAYABLE FROM REVENUES – Outstanding Parity Revenue Bonds."

**Refunding of 2001 Series A Bonds.** All of the outstanding 2001 Series A Bonds will be refunded, on a current basis, on June 21, 2012, at a redemption price equal to the principal amount of the outstanding 2001 Series A Bonds, plus accrued interest to the redemption date, without premium.

<sup>&</sup>lt;sup>\*</sup> Preliminary; subject to change depending on market conditions.

**Refunding of 2002 Series A Bonds.** The outstanding 2002 Series A Bonds maturing on and after November 1, 2013, will be refunded, on an advance basis, on November 1, 2012, at a redemption price equal to the principal amount of the outstanding 2002 Series A Bonds, plus accrued interest to the redemption date, without premium. The 2002 Series A Bonds maturing on November 1, 2012, will be paid from funds on hand as they mature on November 1, 2012.

*Escrow Fund.* A portion of the proceeds of the 2012 Sub-Series C Bonds will be deposited with the Trustee, acting as escrow agent (the "Escrow Agent"), under an Escrow Agreement dated as of June 1, 2012 (the "Escrow Agreement"), by and between the SFPUC and the Escrow Agent.

The amounts deposited from the proceeds of the 2012 Sub-Series C Bonds, together with certain other available moneys, will be held by the Escrow Agent under the Escrow Agreement and invested in federal securities, the principal of and interest on which, when received, will be sufficient to pay the principal of, interest on and redemption premium on the Refunded Prior Bonds on their respective redemption dates.

Sufficiency of the deposits in the Escrow Fund for those purposes will be verified by Causey, Demgen & Moore, Inc., Certified Public Accountants, Denver, Colorado. See "VERIFICATION OF MATHEMATICAL ACCURACY" below. Assuming the accuracy of the verification agent's computations, as a result of the deposit and application of funds as provided in the Escrow Agreement, the Refunded Prior Bonds will be defeased pursuant to the Indenture as of the date of issuance of the 2012 Sub-Series C Bonds.

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

Sources of Funds Par Amount Plus Net Original Issue Premium Plus Funds on Hand with respect to the Refunded Prior Bonds Total Sources	2012 Sub-Series A Bonds N/A	2012 Sub-Series B Bonds N/A	2012 Sub-Series C Bonds	Total
Uses of Funds Deposit to Project Funds <sup>(1)</sup> Escrow Fund <sup>(2)</sup> Deposit to 2012 Series ABC Bond Reserve Account <sup>(3)</sup> Deposit to Capitalized Interest Accounts <sup>(4)</sup> Underwriter's Discount Costs of Issuance <sup>(5)</sup>	N/A	N/A N/A	N/A N/A	
Total Uses				

The proceeds of the 2012 Series ABC Bonds are expected to be applied as follows:

(1) Represents deposits to the respective Project Funds established under the Sixteenth Supplemental Indenture to fund a portion of the WSIP, and the Seventeenth Supplemental Indenture to [reimburse the Commission for litigation settlement costs]. See "PLAN OF FINANCE" and "WATER SYSTEM IMPROVEMENT PROGRAM."

(2) Represents deposits to the Escrow Fund pursuant to the Eighteenth Supplemental Indenture to refund and defease the Refunded Prior Bonds. See "PLAN OF FINANCE – Refunding Plan" above.

(3) Equal to the Required Reserve with respect to the 2012 Series ABC Bonds as of the Closing Date. See "SECURITY FOR THE BONDS – Bond Reserve Accounts."

<sup>(4)</sup> Represents deposits to the Capitalized Interest Account established under the Sixteenth Supplemental Indenture.

<sup>(5)</sup> The costs of issuance include amounts for legal fees, Trustee fees, financial advisory fees, fees of the Public Utilities Revenue Bond Oversight Committee, rating agency fees, printing costs, and other issuance costs relating to the issuance of the 2012 Series ABC Bonds.

### SECURITY FOR THE BONDS

#### **Pledge of Revenues**

*General*. Under the Indenture, the SFPUC has irrevocably pledged the Revenues of the Water Enterprise to the punctual payment of principal of, premium, if any, and interest on the Bonds, which consist of any parity obligations issued under the Indenture, including the 2012 Series ABC Bonds, the Outstanding Bonds described below (see "OBLIGATIONS PAYABLE FROM REVENUES—Outstanding Parity Revenue Bonds"), and any Additional Series of Bonds. This pledge is subject to the allocation of funds provided in the Indenture, as described below. See "– Flow of Funds" below.

Pursuant to Section 5451 of the California Government Code, the pledge of, lien on and security interest in Revenues and certain other funds granted by the Indenture is valid and binding in accordance with the terms thereof from the time of issuance of the 2012 Series ABC Bonds; the Revenues and such other funds shall be immediately subject to such pledge; and such pledge shall constitute a lien and security interest which shall immediately attach to such Revenues and other funds and shall be effective, binding and enforceable against the SFPUC, its successors, creditors, and all others asserting rights therein to the extent set forth and in accordance with the terms of the Indenture irrespective of whether those parties have notice of such pledge and without the need for any physical delivery, recordation, filing or other further act. Such pledge, lien and security interest are not subject to the provisions of Article 9 of the California Uniform Commercial Code.

*Limited Obligation*. THE SFPUC IS NOT OBLIGATED TO PAY THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2012 SERIES ABC BONDS EXCEPT FROM REVENUES. THE SFPUC HAS NO TAXING POWER. THE GENERAL FUND OF THE CITY IS NOT LIABLE FOR THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2012 SERIES ABC BONDS, AND NEITHER THE CREDIT NOR THE TAXING POWER OF THE CITY IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, AND INTEREST ON THE 2012 SERIES ABC BONDS. THE 2012 SERIES ABC BONDS ARE NOT SECURED BY A LEGAL OR EQUITABLE PLEDGE OF, OR CHARGE, LIEN, OR ENCUMBRANCE UPON, ANY PROPERTY OF THE CITY OR OF THE SFPUC OR ANY OF ITS INCOME OR RECEIPTS, EXCEPT THE REVENUES.

*Water Enterprise*. The Indenture defines "Enterprise" (referred to in this Official Statement as the "Water Enterprise") as the whole and each and every part of the municipal water supply, storage and distribution system of the SFPUC, located partially within and partially outside of the City, including all of the presently existing municipal water system of the City and all additions, betterments and extensions to that water system. The Water Enterprise is defined to exclude any water supply, storage or distribution facilities under the jurisdiction of the Hetch Hetchy Water and Power Project ("Hetch Hetchy Water and Power"), which consists of upcountry water supply and power generating facilities, including the Power Enterprise, all of which are also under the jurisdiction of the SFPUC. See "THE PUBLIC UTILITIES COMMISSION—General" and "—Organization, Purposes and Powers."

**Revenues**. The Indenture defines "Revenues" as all gross revenues of the Water Enterprise, including all charges received for and all other income and receipts derived by the SFPUC or the City from the operation of the Water Enterprise, or arising from the Water Enterprise, including water connection and installation charges.

The term "Revenues" also includes all interest, profits or other income derived from the deposit or investment of any moneys in any fund or account established under the Indenture (excluding any Rebate Fund and any escrow fund pledged for the payment of defeased bonds) or in any fund or account of the Water Enterprise and legally available to pay Debt Service on the Bonds, and any other moneys, proceeds and other amounts (including, without limitation, those listed in (1) through (10) below) that the SFPUC determines should be "Revenues" under the Indenture.

However, the term "Revenues" excludes the following:

(1) any money received by or for the account of the City or the SFPUC from the levy or collection of taxes;

- (2) moneys received from the State of California (the "State") and the United States of America and required to be deposited in restricted funds;
- (3) refundable deposits made to establish credit;
- (4) advances and contributions made to the SFPUC or the City to be applied to construction;
- (5) moneys required to be paid to the State and the United States of America pursuant to agreements with the City or the SFPUC;
- (6) moneys received from insurance proceeds or the sale of or upon the taking by or under the threat of eminent domain of all or any part of the Water Enterprise;
- (7) proceeds from Bonds issued by the SFPUC or proceeds from loans obtained by the SFPUC;
- (8) moneys or securities received by the City or the SFPUC as gifts or grants, the use of which is restricted by the donor or grantor;
- (9) sewer service fees or charges; and
- (10) any surcharge imposed by, or upon the direction of any joint powers agency or other governmental entity, other than the SFPUC, the City or any department or agency of the City, whether or not collected by the SFPUC, the City or any department or agency of the City, for the purpose of financing improvements to the facilities comprising the Water Enterprise.

The provisions of the Fifth Supplemental Indenture with respect to the Refundable Credits received by the SFPUC relating to its outstanding Build America Bonds have become effective. See "—Rate Covenants," "—Bond Reserve Accounts," "—Additional Series of Bonds," "—Refunding Bonds" and "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture."

#### **Flow of Funds**

Under the Indenture, moneys in the Revenue Fund, including earnings thereon, will be appropriated, transferred, expended or used for the following purposes pertaining to the financing, maintenance and operation of the Water Enterprise and related facilities owned, operated or controlled by the SFPUC, and only in accordance with the following priority:

- (1) the payment of operation and maintenance expenses for such utility and related facilities;
- (2) the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the SFPUC may establish or the Board of Supervisors may require with respect to employees of the SFPUC;
- (3) the payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure revenue bonds hereafter issued by the SFPUC for the acquisition, construction or extension of the Water Enterprise or related facilities owned, operated or controlled by the SFPUC;
- (4) the payment of principal and interest on general obligation bonds heretofore or hereafter issued by the City for Water Enterprise purposes;
- (5) reconstruction and replacement as determined by the SFPUC or as required by any Water Enterprise revenue bond ordinance duly adopted and approved;
- (6) the acquisition of land, real property or interest in real property for, and the acquisition, construction, enlargement and improvement of, new and existing buildings, structures, facilities,

equipment, appliances and other property necessary or convenient to the development or improvement of such utility owned, controlled or operated by the SFPUC; and

(7) for any other lawful purpose of the SFPUC including the transfer of surplus funds under the Charter.

#### **Revenue Fund**

**Deposits to Revenue Fund.** In accordance with the Charter, but subject to the budget and fiscal provisions of the Charter, the entire gross revenue of the Water Enterprise will be deposited into the Revenue Fund held by the Treasurer of the City (the "Treasurer"). The Treasurer will hold the amounts in the Revenue Fund separate from all other City funds.

Application of Revenue Fund Prior to Effectiveness of Fifth Supplemental Indenture. Prior to the Effective Date of certain provisions of the Fifth Supplemental Indenture, the Treasurer will pay over to the Trustee all moneys in the Revenue Fund, after paying operation and maintenance expenses and making required deposits into pensions or other funds established with respect to SFPUC employees (as required by the Indenture), on or before the tenth day of each month to the extent necessary to make the following deposits:

*Interest*. First, moneys will be transferred to the Interest Fund in an amount equal to the sum of the following:

- (1) At least one-sixth of the aggregate half yearly amount of interest becoming due and payable on the Outstanding Current Interest Bonds (except for Bonds constituting Variable Rate Indebtedness) during the subsequent six months (excluding any interest for which capitalized interest funds are on deposit in the Interest Fund), until the requisite half yearly amount of interest is on deposit in the Interest Fund. For the period from the date of delivery of a Series of Current Interest Bonds until their first interest payment date, the monthly deposit amount will be determined on a monthly pro rata basis so that sufficient funds will be available to pay interest becoming due and payable on the first interest payment date for that Series.
- (2) 110% of the estimated aggregate amount of interest accruing during the month on the Outstanding Variable Rate Indebtedness. However, the amount of the monthly deposit to the Interest Fund may be reduced by the amount by which the deposit in the prior month for interest estimated to accrue on Outstanding Variable Rate Indebtedness exceeded the actual amount of interest accrued during that month. Also, the amount of the monthly deposit into the Interest Fund will be increased by the amount by which the deposit in the prior month for interest estimated to accrue on Outstanding Variable Rate Indebtedness exceeded the actual amount of interest fund will be increased by the amount by which the deposit in the prior month for interest estimated to accrue on Outstanding Variable Rate Indebtedness was less than the actual amount of interest accruing during that month.

No deposit needs to be made into the Interest Fund if the amount contained in that fund is at least equal to the interest to become due and payable on the next interest payment date upon all Bonds that are Outstanding (but excluding any moneys on deposit in the Interest Fund from the proceeds of any Series of Bonds or other source and reserved as capitalized interest to pay interest on any future interest payment dates following said next interest payment date).

Moneys in the Interest Fund will be used and withdrawn by the Trustee solely to pay the interest on the Bonds as it becomes due and payable (including accrued interest on any Bonds purchased or redeemed prior to maturity under the Indenture). **<u>Principal</u>**. Second, moneys will be transferred to the Principal Fund held by the Trustee in an amount at least equal to the sum of the following:

- (1) one-sixth of the aggregate semiannual amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds of all Series having semiannual maturity dates on the following May 1 or November 1, plus
- (2) one-twelfth of the aggregate yearly amount of Bond Obligation becoming due and payable on the Outstanding Serial Bonds of all Series having annual maturity dates on the following November 1, plus
- (3) one-sixth of the aggregate Minimum Sinking Fund Account Payments to be paid during the 6-month period ending on the following May 1 or the following November 1 into the respective Sinking Fund Accounts for the Term Bonds of all Series for which Sinking Fund Accounts have been created and for which semiannual mandatory redemption is required, plus
- (4) one-twelfth of the aggregate of the Minimum Sinking Fund Account Payments to be paid during the 12-month period ending on the following November 1 into the respective Sinking Fund Accounts for the Term Bonds of all Series for which Sinking Fund Accounts are created and for which annual mandatory redemption is required from such Sinking Fund Accounts, plus
- (5) if any Balloon Indebtedness is Outstanding and principal is due on such Balloon Indebtedness on or before the following November 1, sufficient amounts on a monthly pro rata basis to pay when due the Balloon Indebtedness (provided that, if the SFPUC certifies to the Trustee that the principal of the Balloon Indebtedness will be refunded on or before its due date, no amounts need to be set aside towards such principal), plus
- (6) if any Letter of Credit Agreement has been entered into on a parity with the Bonds, sufficient amounts to pay when due on a monthly pro rata basis the obligations of the SFPUC under the Letter of Credit Agreement due on or before the following November 1.

"Balloon Indebtedness," "Bond Obligation," "Current Interest Bonds," "Minimum Sinking Fund Account Payments," "Letter of Credit Agreement," "Series" and "Variable Rate Indebtedness," are defined in "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

**Bond Reserve Fund.** Third, moneys will be transferred to the Bond Reserve Fund in an amount equal to one-twelfth of the aggregate amount of each unreplenished prior withdrawal from the Bond Reserve Fund until the amount on deposit in the Bond Reserve Fund equals the Required Reserve.

If a Bond Reserve Fund Policy satisfies all or a portion of the Required Reserve and a drawing is made on the Bond Reserve Fund Policy, on or before the tenth day of each month following such drawing, the Treasurer must pay an amount at least equal to one-twelfth of the aggregate amount of Policy Costs owing on the Bond Reserve Fund Policy either to the Reserve Provider (as defined in the Indenture) or to the Trustee (who will remit the payment to the Reserve Provider).

Funds or a Bond Reserve Fund Policy on deposit in a Reserve Account will be applied solely to the payment of the Series of Bonds to which such Reserve Account relates and will not be available for payment for any other Series of Bonds.

Application of Revenue Fund Subsequent to Effectiveness of Fifth Supplemental Indenture. Upon their Effective Date, certain provisions of the Fifth Supplemental Indenture will amend the application of funds described above in this section, "—Revenue Fund." Immediately following the Effective Date of the provisions of the Fifth Supplemental Indenture relating to deposits into the Interest Fund, Principal Fund, Sinking Fund

Accounts, the Bond Reserve Fund and the Reserve Accounts, deposits into the Interest Fund shall continue to be made pursuant to the prior provisions of the Indenture described above under "—Application of Revenue Fund Prior to Effectiveness of Fifth Supplemental Indenture" until the next succeeding interest payment date or principal payment date, as applicable. Thereafter, the monthly deposits required with respect to fixed rate indebtedness will cease, and instead, the Treasurer will pay over to the Trustee all moneys in the Revenue Fund, after paying operation and maintenance expenses and making required deposits into pensions or other funds established with respect to SFPUC employees (as required by the Indenture), to the extent necessary to make the following deposits:

<u>Interest</u>. First, on or before the fifth Business Day preceding each subsequent interest payment date, the Treasurer is required to pay to the Trustee for deposit in the Interest Fund an amount equal to the sum of the following:

- (1) The amount of interest becoming due and payable on the Outstanding Bonds of such Series that are Current Interest Bonds (except for Bonds constituting Variable Rate Indebtedness) on such interest payment date (less any amounts on deposit in such fund, including, but not limited to, Refundable Credits available to pay such interest, but excluding amounts on deposit which are reserved as capitalized interest to pay interest during any subsequent period).
- (2) 110% of the estimated aggregate amount of interest due on such interest payment date on the Outstanding Variable Rate Indebtedness. However, the amount required to be deposited to the Interest Fund for any period may be reduced by the amount by which the deposit in the prior period for interest estimated to accrue on Outstanding Bonds if such Series that are Variable Rate Indebtedness exceeded the actual amount of interest accrued during that period. Also, the amount required to be deposited into the Interest Fund for any period will be increased by the amount by which the deposit in the prior period for interest estimated to accrue on Outstanding Variable Rate Indebtedness was less than the actual amount of interest accruing during that period. Finally, the amount required to be deposited into the Interest Fund for any period will be reduced by any Refundable Credits on deposit in the Interest Fund and available to pay interest for such period.

No deposit needs to be made into the Interest Fund if the amount contained in that fund is at least equal to the interest to become due and payable on the next interest payment date upon all Bonds that are Outstanding (but excluding any moneys on deposit in the Interest Fund from the proceeds of any Series of Bonds or other source and reserved as capitalized interest to pay interest on any interest payment dates following said next interest payment date). See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture."

Moneys in the Interest Fund will be used and withdrawn by the Trustee solely to pay the interest on the Bonds as it becomes due and payable (including accrued interest on any Bonds purchased or redeemed prior to maturity under the Indenture).

<u>**Principal.**</u> Second, on or before the fifth Business Day preceding each subsequent principal payment date, the Treasurer is required to pay to the Trustee for deposit in the Principal Fund an amount equal to the sum of the following:

- (1) the aggregate amount of Bond Obligation of such Series (less any amounts on deposit in such fund) becoming due and payable on such principal payment date, plus
- (2) the Minimum Sinking Fund Account Payments required to be made with respect to any Term Bonds of such Series on such principal payment date, plus
- (3) if any Letter of Credit Agreement has been entered into payable from Net Revenues on a parity with the Bonds, sufficient amounts to pay the obligations of the SFPUC under the Letter of Credit Agreement due on such principal payment date.

If the amounts on deposit in the Principal Fund are insufficient to make all deposits required to be made with respect to any principal payment date, such amounts will be applied on a Proportionate Basis and in such proportion as the Serial Bonds, the Minimum Sinking Fund Payments for Term Bonds, and the Letter of Credit Agreement obligations shall bear to each other. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture."

**Bond Reserve Fund.** Third, in the event of any withdrawal from any Reserve Account following the Effective Date, the Treasurer is required to pay to the Trustee for deposit in such Reserve Account, on a *pari passu* basis with transfers to any Reserve Account, on or before the fifth Business Day preceding each interest payment date following such withdrawal, an amount sufficient to replenish any prior withdrawal from such Reserve Account, either in two semi-annual installments for Reserve Accounts established with respect to fixed rate Bonds only or in equal installments over a 12-month period for Reserve Account is equal to the Required Reserve with respect to the applicable Series of Bonds (or such larger balance as may be required by any Supplemental Indenture) at the end of such 12-month period.

If a Bond Reserve Fund Policy satisfies all or a portion of the Required Reserve and a drawing is made on the Bond Reserve Fund Policy, on or before the fifth Business Day prior to each interest payment date following such drawing, the Treasurer must pay, either in two semi-annual installments for Reserve Accounts established with respect to fixed rate Bonds only or in equal installments over a 12-month period for Reserve Accounts established with respect to any Variable Rate Bonds, an amount sufficient to repay the aggregate amount of Policy Costs owing with respect to such drawing by the end of such 12-month period to the Reserve Provider (as defined in the Indenture) or to the Trustee (who will remit the payment to the Reserve Provider). See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture."

On and after the Effective Date of the provisions of the Fifth Supplemental Indenture relating to the Required Reserve and deposits into the Bond Reserve Fund and the Reserve Accounts, any Reserve Requirement established with respect to any Series of Bonds issued as Build America Bonds prior to such date may, at the option of the SFPUC, be recalculated in accordance with the provisions of the Fifth Supplemental Indenture.

Funds or a Bond Reserve Fund Policy on deposit in a Reserve Account will be applied solely to the payment of the Series of Bonds to which such Reserve Account relates and will not be available for payment for any other Series of Bonds.

#### **Rate Covenants**

**Sufficiency of Revenues.** The SFPUC has covenanted in the Indenture that it will, at all times while any of the Bonds remain Outstanding, establish, fix, prescribe and collect rates, fees and charges in connection with the water, services and facilities furnished by the Water Enterprise so as to yield Revenues at least sufficient, after making reasonable allowances for contingencies and errors in the estimates, to pay the following amounts:

- (1) the interest on and principal of the Bonds as they become due and payable (but not including any interest moneys for the payment of which have been deposited in the Interest Fund from the proceeds of any Series of Bonds or from any other source);
- (2) all other payments required for compliance with the terms of the Indenture and of any Supplemental Indenture providing for the issuance of Additional Series of Bonds pursuant to the Indenture;
- (3) all other payments to meet any other obligations of the SFPUC which are charges, liens or encumbrances upon, or payable from, the Revenues; and

(4) all current Operation and Maintenance Costs of the Water Enterprise (but not including such Operation and Maintenance Costs as are scheduled to be paid by the SFPUC from moneys other than Revenues, such money to be clearly available for such purpose).

**Debt Service Coverage**. In addition to the requirements set forth above, the Indenture provides that the SFPUC will, at all times while any of the Bonds remain Outstanding, establish, fix, prescribe and collect rates, fees and charges in connection with the water, services and facilities furnished by the Water Enterprise so as to yield Net Revenues for the twelve months following the date of calculation, which (together with any fund balances of the SFPUC or the Water Enterprise legally available for payment of Debt Service and not budgeted to be expended during such twelve months but excluding the Bond Reserve Fund and Rebate Fund) are equal to at least 1.25 times Annual Debt Service for such 12-month period, but from such Debt Service excluding any funded interest.

Upon the issuance of the 2011 Series ABCD Bonds, the provisions of the Fifth Supplemental Indenture that amend the definitions of Debt Service and Annual Debt Service to reduce the amount of interest used to calculate Debt Service and Annual Debt Service during any twelve-month period ending June 30, subject to certain conditions, by an amount equal to certain Refundable Credits the SFPUC is scheduled to receive from the federal government during the same period in connection with any Series of Bonds issued as Build America Bonds, became effective. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture —Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service."

*Net Revenues and Operation and Maintenance Costs*. For purposes of the rate covenants contained in the Indenture, "Net Revenues" and "Operation and Maintenance Costs of the Enterprise" are defined as follows:

The term "Net Revenues" is defined in the Indenture as:

- all of the Revenues (but not including interest on investment of funds required to be deposited in said funds or investment earnings required to be deposited in the Improvement Fund) less
- all Operation and Maintenance Costs of the Enterprise (but not including such Operation and Maintenance Costs as are scheduled to be paid by the SFPUC from moneys other than Revenues, such moneys to be clearly available for such purpose).

The Indenture defines the term "Operation and Maintenance Costs of the Enterprise" as the reasonable and necessary costs of operating and maintaining the Water Enterprise, calculated on sound accounting principles, including (among other things) salaries and wages, fees for services, costs of materials, supplies and fuel, reasonable expenses of management, legal fees, accounting fees, repairs and other expenses necessary to maintain and preserve the Water Enterprise in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes (if any), other similar costs, and the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the SFPUC may establish or the Board of Supervisors may require with respect to employees of the SFPUC.

"Operation and Maintenance Costs of the Enterprise" exclude in all cases the following:

- (1) depreciation and obsolescence charges or reserves therefor,
- (2) amortization of intangibles or other bookkeeping entries of a similar nature,
- (3) costs of capital additions, replacements, betterments, extensions or improvements to the Water Enterprise, which under generally accepted accounting principles are chargeable to a capital account or to a reserve for depreciation, and
- (4) charges for the payment of principal and interest on any general obligation bonds, revenue bonds or other indebtedness heretofore or hereafter issued for Water Enterprise purposes.

See "APPENDIX A-SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE-Definitions."

#### **Bond Reserve Account**

**Establishment of Bond Reserve Account for the 2012 Series ABC Bonds.** For Bonds issued prior to the Effective Date of the provisions of the Fifth Supplemental Indenture relating to the Required Reserve, the Bond Reserve Fund and the Reserve Accounts, the Indenture establishes the Bond Reserve Fund and requires the establishment of a bond reserve account (each, a "Bond Reserve Account") within the Bond Reserve Fund for each Series of Bonds issued under the Indenture, and requires the deposit in each bond reserve account of an amount equal to the Required Reserve for the related Series of Bonds. Each Bond Reserve Account is available only for the payment of debt service on the Series of Bonds for which such Bond Reserve Account was established. For any Series of Additional Bonds issued on or after the Effective Date of such provisions of the Fifth Supplemental Indenture, the Required Reserve will be the amount, if any, required to be deposited into a Reserve Account for such Series of Bonds as set forth in the Supplemental Indenture pursuant to which such Series of Additional Bonds is issued. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Definitions – Required Reserve."

Pursuant to the Indenture, the Trustee has established the 2012 Series ABC Bond Reserve Account (the "2012 Series ABC Bond Reserve Account") for the 2012 Series ABC Bonds.

Pursuant to the Indenture, the Required Reserve for any Series of Bonds may be funded through a Bond Reserve Fund Policy, which is a policy of insurance or surety bond issued by a Municipal Bond Insurer, or a letter of credit issued by a Qualified Bank.

*Satisfaction of Required Reserves*. The SFPUC intends to fund the 2012 Series ABC Bond Reserve Account through the deposit of proceeds of the 2012 Series ABC Bonds in an amount equal to the Required Reserve for the 2012 Series ABC Bonds. See "ESTIMATED SOURCES AND USES OF FUNDS."

*Required Reserve for the 2012 Series ABC Bonds.* At any date of calculation, the Required Reserve for the 2012 Series ABC Bond Reserve Account is one-half of the Maximum Annual Debt Service for the 2012 Series ABC Bonds. On the date of issuance of the 2012 Series ABC Bonds, the Required Reserve for the 2012 Series ABC Bonds will be \$\_\_\_\_\_.

Certain provisions of the Fifth Supplemental Indenture have become effective and have amended the definition of Maximum Annual Debt Service to reduce the amount of interest used to calculate Maximum Annual Debt Service during any twelve-month period ending June 30, subject to certain conditions, by an amount equal to certain Refundable Credits the SFPUC is scheduled to receive from the federal government during the same period in connection with any Series of Bonds issued as Build America Bonds. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture—Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service."

No deposit needs to be made into the 2012 Series ABC Bond Reserve Account so long as the 2012 Series ABC Bond Reserve Account contains an amount equal to the Required Reserve for the 2012 Series ABC Bonds, or if the sum of the amounts contained in the 2012 Series ABC Bond Reserve Fund and in the Interest Fund and in the Principal Fund and available for the payment of the Bonds is at least equal to the sum of the aggregate principal amount of all of the Bonds then Outstanding and all of the interest then due or thereafter to become due on all such Bonds.

*Uses of Bond Reserve Accounts.* The Trustee will use and withdraw moneys in a Bond Reserve Account solely to pay the principal of, sinking fund account payments and interest on the related Series of Bonds if no other moneys are available for these purposes, or to pay or redeem all of the Bonds of such Series then Outstanding. Each such Bond Reserve Account will be applied solely to the payment of debt service on the series of Bonds for which such Bond Reserve Account was established and will not be available for the payment of any other series of Bonds.

So long as the SFPUC is not in default under the Indenture, and in each Reserve Account there is a balance equal to the Required Reserve for the related series of Bonds, the Trustee will withdraw any amount in a Bond Reserve Account in excess of the related Required Reserve semiannually, on May 1 and November 1 of each year, and transfer that excess amount to the Treasurer for deposit in the Revenue Fund or, during the period of construction of the Project or any portion thereof, the Improvement Fund. Because the provisions of the Fifth Supplemental Indenture amending the definition of Maximum Annual Debt Service to account for the receipt of Refundable Credits have become effective, the SFPUC intends to release the corresponding amounts from the Reserve Accounts with respect to those Series of Bonds issued as Build America Bonds.

*Existing Bond Reserve Accounts*. The reserve amount and funding sources for the current Bond Reserve Accounts maintained for the Outstanding Bonds of the SFPUC are shown in the following table.

Ţ	Account			Original
Issue	Balance <sup>(1)</sup>		Surety Policy Limit	Funding Source
1991 Series A Bonds	\$	0	\$2,500,000	National Public Finance Guarantee
(2)				Corporation surety bond
2001 Series A Bonds <sup>(2)</sup>		0	4,607,375	Financial Security Assurance Inc. surety
		~		bond
2002 Series A Bonds <sup>(2)</sup>		0	5,278,312	National Public Finance Guarantee
		~		Corporation surety bond
2002 Refunding Series B Bonds		0	4,329,084	National Public Finance Guarantee
				Corporation surety bond
2006 Series A Bonds	15,958,03	1	0	Bond proceeds (currently invested in
				Societe Generale guaranteed investment
				contract)
2006 Refunding Series B Bonds		0	5,822,459	Syncora Guarantee (fka XL Capital
				Assurance Inc.) surety bond
2006 Refunding Series C Bonds		0	2,126,628	Syncora Guarantee (fka XL Capital
		~	0	Assurance Inc.) surety bond
2009 Series A Bonds	13,587,83	8	0	Bond proceeds (currently invested in U.S.
		~	0	Treasury securities)
2009 Series B Bonds	13,467,93	8	0	Bond proceeds (currently invested in U.S.
		~	0	Treasury securities)
2010 Series ABC Bonds	19,363,25	9	0	Bond proceeds (currently invested in U.S.
				Treasury securities)
2010 Series DE Bonds	19,273,31	1	0	Bond proceeds (currently invested in U.S.
				Treasury securities)
2010 Series FG Bonds	24,088,15	8	0	Bond proceeds (currently invested in U.S.
		-	<i>c</i>	Treasury securities)
2011 Series ABCD Bonds	29,007,62	5	0	Bond proceeds (currently invested in U.S.
				Treasury securities)

# BOND RESERVE REQUIREMENT AND FUNDING SOURCES AS OF MARCH 1, 2012

<sup>(1)</sup> Excludes interest earnings, if any, on account balances.

<sup>2)</sup> These bonds will be defeased and refunded with a portion of the proceeds of the 2012 Sub-Series C Bonds (see "PLAN OF FINANCE – Refunding Plan"), and the related reserve account surety policies will be released as of each respective refunding date.

None of the amounts described above are available to pay principal of, premium, if any, or interest on the 2012 Series ABC Bonds.

*Status of Existing Bond Reserve Account Surety Bonds.* Certain of the ratings of the providers of surety bonds currently held in existing Bond Reserve Accounts have been reduced or withdrawn subsequent to the deposit of such surety bonds in such Bond Reserve Accounts. The Indenture does not require that the rating of any surety bond held in a Bond Reserve Account be maintained after the date of deposit. In the event of a financial failure of a surety bond provider, the SFPUC may elect to fund a cash reserve in place of the affected surety bond or bonds.

# Additional Series of Bonds

Additional Bonds Test in the Indenture. The Indenture provides that Additional Series of Bonds secured by Revenues on a parity with the Outstanding Bonds and the 2012 Series ABC Bonds (each an "Additional Series of Bonds") may be issued if certain conditions are met, including the SFPUC's delivery to the Trustee of the following documents (among others):

- (1) A certificate of the SFPUC setting forth the following:
  - (a) Net Revenues for any period of twelve consecutive calendar months out of the eighteen calendar months next preceding the authentication and delivery of the Additional Series of Bonds, and
  - (b) the Debt Service for such 12-month period, and demonstrating that for such 12-month period Net Revenues equaled at least 1.25 times the Debt Service.
- (2) If any portion of the proceeds of such Additional Series of Bonds is to be used to finance construction, a certificate of the Consulting Engineers setting forth:
  - (a) the estimated date of completion for the portion of the Project for which such Additional Series of Bonds is being issued and for any other uncompleted portion of the Project, and
  - (b) an estimate of the cost of construction of such portion of the Project and of any other uncompleted portion of the Project.
- (3) A written report of a Qualified Independent Consultant setting forth estimates for each of the next three Fiscal Years of:
  - (a) Revenues,
  - (b) Operation and Maintenance Costs of the Water Enterprise, and
  - (c) Net Revenues.

If any portion of the proceeds of such Additional Series of Bonds is to be used to finance construction, the estimate will be made for the three Fiscal Years following the Fiscal Year in which the Consulting Engineers estimate such portion of the Project will be completed.

- (4) A certificate of the SFPUC setting forth the following:
  - (a) the estimates of Net Revenues provided by the Qualified Independent Consultant pursuant to paragraph (3) above for each of such three Fiscal Years, and
  - (b) the Annual Debt Service for such three Fiscal Years (including estimated Annual Debt Service for future Additional Series of Bonds, if any), that will be required to complete payment of any uncompleted portion of the Project (based on the estimate of the Consulting Engineers), which certificate demonstrates that the estimated Net Revenues in each of such three Fiscal Years is at least equal to 1.25 times the Annual Debt Service for the corresponding Fiscal Year.

Such certificate may anticipate projected rates not yet enacted and may include with Revenues for any 12-month period any fund balances of the SFPUC or the Water Enterprise legally available for payment of Debt Service and not budgeted to be expended during such twelve months but excluding the Bond Reserve Fund and Rebate Fund.

Certain provisions of the Fifth Supplemental Indenture have become effective and have amended the definitions of Debt Service, Annual Debt Service, Average Annual Debt Service and Maximum Annual Debt Service to reduce the amount of interest used to calculate Debt Service, Annual Debt Service, Average Annual Debt Service and Maximum Annual Debt Service during any twelve-month period ending June 30, subject to certain conditions, by an amount equal to certain Refundable Credits the SFPUC is scheduled to receive from the federal government during the same period in connection with any Series of Bonds issued as Build America Bonds. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture—Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service."

All certificates and written reports will be based upon the actual interest rate or rates determined at the time the Additional Series of Bonds are sold.

Issuance of Additional Bonds with Consent of Bond Owners and Credit Provider. The Indenture also provides that Additional Series of Bonds may be issued without compliance with any of the requirements described above with the written consent of Owners of a majority of the aggregate Bond Obligations of Bonds Outstanding and any Credit Provider. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE." Any Additional Bonds issued under this provision would, however, be subject to the requirements for issuing revenue bonds under the City Charter. See "OBLIGATIONS PAYABLE FROM REVENUES—Authority for Issuance of Revenue Bonds and Other Obligations Payable from Revenues."

# **Refunding Bonds**

*Indenture Requirements*. The Indenture provides that Additional Series of Bonds may be issued to refund any Bonds, including the 2012 Series ABC Bonds, without meeting the test for the issuance of Additional Bonds described above, if the SFPUC delivers to the Trustee (among other documents) a certificate of an Independent Certified Public Accountant to the effect that the Average Annual Debt Service for the Additional Series of Bonds will be equal to or less than the Average Annual Debt Service on the Bonds to be refunded.

Certain provisions of the Fifth Supplemental Indenture have become effective and have amended the definitions of Debt Service, Annual Debt Service, Average Annual Debt Service and Maximum Annual Debt Service to reduce the amount of interest used to calculate Debt Service, Annual Debt Service, Average Annual Debt Service and Maximum Annual Debt Service during any twelve-month period ending June 30, subject to certain conditions, by an amount equal to certain Refundable Credits the SFPUC is scheduled to receive from the federal government during the same period in connection with any Series of Bonds issued as Build America Bonds. See "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Fifth Supplemental Indenture—Amendments to Indenture—Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service."

*City Charter Requirements.* The Charter requires that refunding bonds may be issued without voter approval only if such refunding results in net debt service savings on a present value basis, calculated as described in the SFPUC's Debt Management Policies and Procedures.

# Subordinate Obligations; Obligations Not Payable from Revenues

The Indenture permits the SFPUC to authorize and issue bonds, notes, warrants, certificates or other obligations or evidences of indebtedness, the principal of or interest on which would be payable either (i) from Revenues after and subordinate to the payment from Revenues of the principal of and interest on the Bonds, or (ii) from moneys which are not Revenues.

# **OBLIGATIONS PAYABLE FROM REVENUES**

#### Authority for Issuance of Revenue Bonds and Other Obligations Payable from Revenues

*City Charter.* The Charter authorizes the SFPUC to issue revenue bonds and commercial paper notes and to incur other obligations payable from or secured by a pledge of Revenues. The Charter generally requires voter approval of revenue bonds issued by the SFPUC.

**Proposition A.** On November 5, 2002, voters of the City approved Proposition A, specifically authorizing the issuance of up to \$1.628 billion of revenue bonds for the purpose of funding the SFPUC's Water Enterprise capital improvement program. The SFPUC has previously issued \$1,331,815,000 aggregate principal amount of Bonds and authorized the issuance of up to \$250,000,000 of commercial paper notes pursuant to the authority conferred upon it by Proposition A.

**Proposition E.** As a further exception to the general requirement under the Charter that the issuance of revenue bonds be approved by voters of the City, Charter amendments enacted by the voters on November 5, 2002 under Proposition E authorize the SFPUC, subject to the referendum process, to issue revenue bonds, notes and other forms of indebtedness when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors of the City (the "Board of Supervisors"), for the purpose of reconstructing, replacing, expanding, preparing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the SFPUC.

Board action to authorize or issue bonds under Proposition E is subject to certain additional conditions, requiring certification by an independent engineer and certification by the San Francisco Planning Department, as discussed in "APPENDIX B—SUMMARIES OF CERTAIN LOCAL INITIATIVES (PROPOSITIONS A, E AND P)." Any such ordinance will become effective thirty days after its adoption unless it is opposed through the referendum process. Opposition may be made by filing with the Board of Supervisors a petition protesting the passage of that ordinance. Such petition must be signed by voters in a number equal to at least 10% of the votes cast for all candidates for Mayor in the last preceding general municipal election for Mayor. If a referendum passes, the ordinance is suspended from becoming effective. The Board of Supervisors may reconsider the ordinance. If it is not entirely repealed, the Board of Supervisors is required to submit the ordinance to voters at the next general municipal or statewide election or at a special municipal election and will not become effective until approved by voters at such an election.

Authority for the Issuance of the 2012 ABC Bonds. The 2012 ABC Bonds are being issued under the following authority:

2012 Sub-Series A Bonds. The 2012 Sub-Series A Bonds are being issued under Proposition E and two ordinances previously approved by the Board of Supervisors under Proposition E: Ordinance No. 189-09, which was adopted in August 2009, and Ordinance No. 089-10, which was adopted in April 2010.

2012 Sub-Series B Bonds. The 2012 Sub-Series B Bonds are being issued under Proposition A.

2012 Sub-Series C Bonds. The 2012 Sub-Series C Bonds are being issued under Section 9.109 of the City Charter.

See "APPENDIX B-SUMMARIES OF CERTAIN LOCAL INITIATIVES (PROPOSITIONS A, E AND P)."

#### **Revenue Bond Oversight Committee**

On November 5, 2002, the voters of the City adopted Proposition P, an ordinance that established the Public Utilities Revenue Bond Oversight Committee ("RBOC") to report publicly to the Mayor, the SFPUC and the Board of Supervisors regarding the expenditure of revenue bond proceeds on the repair, replacement, upgrading and expansion of the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (each as defined herein). The RBOC has commissioned and issued periodic reports containing its findings and recommendations regarding the WSIP, the most recent of which was issued in December 2011.

The RBOC has seven members appointed as follows: two by the Mayor, two by the Board of Supervisors, one by the City Controller, one by the Bay Area Water Users Association ("BAWUA") under the auspices of the Bay Area Water Supply and Conservation Agency ("BAWSCA"). The seventh member is the City's Budget Analyst or his or her representative. The work of the RBOC is funded by 1/20th of 1% of the gross bond proceeds of revenue bond issuances or sales to the extent permitted by law.

Under Proposition P, the RBOC sunsets in 2013, unless extended by the Board. The Commission has approved an extension of the RBOC's term, which is anticipated to be considered by, but has not yet been approved by, the Board of Supervisors.

The RBOC may, by majority vote of all its members, prohibit the issuance or sale of authorized SFPUC revenue bonds which have yet to be issued or sold if, after reviewing materials provided by the SFPUC and conducting its own independent audit, and after consultation with the City Attorney, the RBOC determines that revenue bond proceeds have been or are being spent on purposes not authorized by the authorizing bond resolution or otherwise in a manner amounting to an illegal expenditure or illegal waste of such revenue bond proceeds. The SFPUC may appeal such a decision to the Board of Supervisors within thirty days. The Board of Supervisors may overturn such a decision by the RBOC by a two-thirds vote of all members of the Board of Supervisors with evidence from the SFPUC of corrective measures satisfactory to the Board or may remand the decision to the RBOC for further consideration.

For further information regarding the RBOC, see "APPENDIX B—SUMMARIES OF CERTAIN LOCAL INITIATIVES (PROPOSITIONS A, E AND P)."

# **Outstanding Parity Revenue Bonds**

All Bonds in the table below (the "Outstanding Bonds") have been issued pursuant to the Indenture and secured by a pledge of Revenues on parity with the 2012 Series ABC Bonds.

Series of Bonds Water Revenue Bonds,	Purpose Repair and replacement of	Initial Principal <u>Amount</u>	Principal Amount Outstanding as of <u>March 1, 2012</u>
1991 Series A	water facilities	\$ 70,145,682 <sup>(1)</sup>	$,100,000^{(2)}$
Water Revenue Bonds,	System Reliability Project and	\$ 70,145,082	\$ 7,100,000
2001 Series A $^{(3)}$	Safe Water Project	140,000,000	25,600,000
Water Revenue Bonds,	System Reliability Project and	140,000,000	23,000,000
2002 Series A $^{(3)}$	Safe Water Project	164,000,000	77,365,000
Water Revenue Bonds,	Refund previously outstanding	101,000,000	11,200,000
2002 Refunding Series B	Bonds of the SFPUC	85,260,000	31,425,000
Water Revenue Bonds,	Water system improvements	,,	
2006 Series A	under Proposition A	507,815,000	470,310,000
Water Revenue Bonds,	Refund previously outstanding	, ,	, ,
2006 Refunding Series B	Bonds of the SFPUC	110,065,000	94,335,000
Water Revenue Bonds,	Refund previously outstanding		
2006 Refunding Series C	Bonds of the SFPUC	48,730,000	36,125,000
Water Revenue Bonds,	Water system improvements		
2009 Series A	under Proposition A	412,000,000	405,540,000
Water Revenue Bonds,	Water system improvements		
2009 Series B	under Proposition A	412,000,000	405,390,000
Water Revenue Bonds,	Water system improvements		
2010 Series ABC <sup>(4)</sup>	under Proposition E	488,705,000	486,915,000
Water Revenue Bonds,	Water system improvements		
2010 Series DE <sup>(4)</sup>	under Proposition E	446,925,000	446,925,000
Water Revenue Bonds,	Water system improvements		
2010 Series FG <sup>(4)</sup>	under Proposition E	532,430,000	532,430,000
Water Revenue Bonds,	Water system improvements		
2011 Series ABCD	under Proposition E and		
	Refund previously outstanding		
	Bonds of the SFPUC	<u>720,750,000</u>	<u>720,750,000</u>
Total		\$4,138,825,682	\$3,740,210,000

(1)Issued as capital appreciation bonds.

(2) Represents full accreted value at maturity.

(3) These bonds will be defeased and refunded with a portion of the proceeds of the 2012 Sub-Series C Bonds. See "PLAN OF FINANCE - Refunding Plan."

(4) The 2010 Sub-Series B, Sub-Series E, and Sub-Series G Bonds were issued as Build America Bonds.

# **Subordinate Debt and Commercial Paper**

No Limits on Subordinate Debt. The SFPUC may issue bonds or incur other indebtedness secured by a pledge of Revenues on a basis subordinate to the pledge thereof securing the Bonds.

Commercial Paper Program. The SFPUC has established a commercial paper program to fund construction costs relating to the WSIP. See "FINANCING THE WATER SYSTEM IMPROVEMENT PROGRAM."

The SFPUC initially implemented the commercial paper program in 2003 pursuant to authorization under Proposition A (the "Proposition A Commercial Paper Notes"). The Proposition A Commercial Paper Notes are authorized to be issued in an aggregate principal amount up to \$250 million and are supported by an irrevocable,

direct-pay letter of credit issued by Bank of America, N.A. The Proposition A Commercial Paper Notes are issued pursuant to Proposition A, so the total principal amount of Proposition A Commercial Paper Notes plus any bonds issued to finance new capital projects pursuant to Proposition A may not exceed the maximum voter-authorized amount of \$1.628 billion.

In 2009, the SFPUC expanded its commercial paper program by an additional \$250 million, pursuant to authorization under Proposition E (the "Proposition E Commercial Paper Notes"), bringing the commercial paper program total to \$500 million. The Proposition E Commercial Paper Notes are supported by liquidity facilities issued by JPMorgan Chase Bank, National Association, with a stated amount of \$175 million, and U.S. Bank National Association, with a stated amount of \$75 million.

The Proposition A Commercial Paper Notes and the Proposition E Commercial Paper Notes are secured and payable from Revenues on a basis subordinate to the payment of debt service on the Bonds.

Currently, no Proposition A Commercial Paper Notes are outstanding under this program.

The SFPUC currently has \$174 million in Proposition E Commercial Paper Notes outstanding.

# State and Federal Loans

The Water Enterprise has no outstanding loan obligations payable to the United States of America or the State from Revenues. The Water Enterprise may in the future, however, participate in federal or State loan programs and incur obligations payable from Revenues. While the Water Enterprise does not have any State or federal loans pending in advance of this issue, it could apply for additional loans in the future. Such loans may be payable on a parity with the 2012 Series ABC Bonds if the conditions for the issuance of parity debt under the Indenture are met. See "SECURITY FOR THE BONDS—Additional Series of Bonds."

# **Contingent Payment Obligations**

The Water Enterprise has no interest rate swaps, caps or hedges or other contingent payment obligations payable from Revenues. The Water Enterprise may in the future, however, incur contingent payment obligations payable from Revenues. Such contingent payment obligations may be payable on a parity with the 2012 Series ABC Bonds if the conditions for the issuance of parity debt under the Indenture are met. See "SECURITY FOR THE BONDS—Additional Series of Bonds."

# **Other Obligations Payable from Revenues**

The SFPUC purchased and cleared a parcel at 525 Golden Gate Avenue, one block north of City Hall, and is constructing a 13-story new office building on this site to house the administrative offices of the SFPUC's three utility enterprises that are now located in various leased facilities. Total project costs are expected to be approximately \$202 million and are being financed with land sale proceeds, fund balances, grants and the proceeds of Certificates of Participation executed and delivered in two series on October 7, 2009, in the aggregate principal amount of \$167,670,000, representing interests in a City General Fund lease. Construction of the building commenced in January 2010 and substantial completion and move-in are expected by July 2012. Pursuant to a Memorandum of Understanding between the City and the SFPUC, the SFPUC will reimburse the City General Fund for all debt service in connection with this City financing. The SFPUC will allocate such payment obligations internally among its three utility enterprises based on percentage usage. The Water Enterprise is currently responsible for 71.4% of such obligations, payable from Revenues on a basis subordinate to the payment of principal of and interest on the Bonds.

# **Debt Service Requirements**

Set forth in the following table are debt service requirements on the 1991 Series A Bonds, the 2001 Series A Bonds, the 2002 Series A Bonds, the 2002 Refunding Series B Bonds, the 2006 Series A Bonds, the 2006 Refunding Series C Bonds, the 2009 Series A Bonds, the 2009 Series B Bonds, the 2010 Series ABC Bonds, the 2010 Series DE Bonds, the 2010 Series FG Bonds, the 2011 Series ABCD Bonds and the 2012 Series ABC Bonds.

# DEBT SERVICE REQUIREMENTS ON OUTSTANDING BONDS

Fiscal Year (ending	Outstanding	2012 Sub- Series A	2012 Sub- Series A	2012 Sub- Series B	2012 Sub- Series B	2012 Sub- Series C	2012 Sub- Series C	Total Debt
June 30)	Bonds <sup>(1) (2) (3)</sup>	Principal	Interest <sup>(2)</sup>	Principal	Interest	Principal	Interest	Service <sup><math>(2)(3)(4)</math></sup>
2012	\$ 146,210,559	Timeipai	Interest	Timeipai	Interest	Timeipai	interest	Service
2012	166,499,006							
2014	194,886,173							
2015	240,008,460							
2016	250,688,624							
2017	252,234,174							
2018	257,603,149							
2019	257,469,198							
2020	257,350,526							
2021	272,521,504							
2022	272,276,975							
2023	271,794,754							
2024	271,284,966							
2025	270,761,315							
2026	270,216,329							
2027	269,624,571							
2028	268,983,278							
2029	268,356,040							
2030	267,834,203							
2031	267,093,603							
2032	249,955,286							
2033	239,561,389							
2034	227,891,541							
2035	226,733,541							
2036	225,653,615							
2037	224,315,945							
2038	191,076,884							
2039	189,798,589							
2040	188,279,024							
2041	132,676,888							
2042	80,108,185							
2043	31,266,850							
2044	30,818,976							
2045	30,341,333							
2046	29,846,313							
2047	29,330,789							
2048	28,786,808							
2049	28,221,241							
2050	27,625,789							
2051	27,006,975							
TOTAL <sup>(4)</sup>	\$7,432,993,365			·				

TOTAL<sup>(4)</sup> \$7,432,993,365

(1) Includes 1991 Series A, 2001 Series A, 2002 Series A, 2002 Refunding Series B, 2006 Series A, 2006 Refunding Series B, 2006 Refunding Series C, 2009 Series A, 2009 Series B, 2010 Series ABC, 2010 Series DE, 2010 Series FG and 2011 Series ABCD Bonds.

<sup>(2)</sup> Net of capitalized interest payments.

<sup>(3)</sup> Calculation of interest due on Bonds shown without offset for anticipated receipts of any Refundable Credits.

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

# **RISK FACTORS**

This section provides a general overview of certain risk factors which should be considered, in addition to the other matters set forth in this Official Statement, in evaluating an investment in the 2012 Series ABC Bonds. This section is provided for convenience and is not meant to be a comprehensive or definitive discussion of the risks associated with an investment in the 2012 Series ABC Bonds, and the order in which this information is presented does not necessarily reflect the relative importance of various risks.

Potential investors in the 2012 Series ABC Bonds are advised to consider the following factors, among others, and to review this entire Official Statement to obtain information essential to the making of an informed investment decision. Any one or more of the risk factors discussed below, among others, could lead to a decrease in the market value and/or in the marketability of the 2012 Series ABC Bonds or adversely affect the ability of the SFPUC to make timely payments of principal of or interest on the 2012 Series ABC Bonds. There can be no assurance that other risk factors not discussed herein will not become material in the future.

# General

The ability of the SFPUC to comply with its covenants under the Indenture and to generate Revenues sufficient to pay principal of and interest on the 2012 Series ABC Bonds may be adversely affected by actions and events outside of the control of the SFPUC and may be adversely affected by actions taken (or not taken) by voters, property owners, taxpayers or persons obligated to pay fees and charges. Among other matters, drought, general and local economic conditions and changes in law and government regulations could adversely affect the amount of Revenues realized by the SFPUC or significantly raise the cost of operating the Water Enterprise.

In addition, the realization of future Revenues is subject to, among other things, the capabilities of management of the SFPUC, the ability of the SFPUC to provide service to its Retail Customers and the Wholesale Customers, the ability of the SFPUC to establish, maintain and collect charges from its Retail Customers and the Wholesale Customers and the ability of the SFPUC to establish, maintain and collect rates and charges sufficient to pay for Operation and Maintenance Costs of the Water Enterprise, the 2012 Series ABC Bonds and other obligations payable from Revenues. See "FINANCIAL OPERATIONS" and "OBLIGATIONS PAYABLE FROM REVENUES."

# **Limited Obligation**

If the SFPUC defaults on its obligations to make debt service payments on the Bonds, the Trustee has the right under the Indenture to accelerate the total unpaid principal amount of the Bonds. However, in the event of a default and such acceleration, there can be no assurance that the SFPUC, and correspondingly the Trustee, will have sufficient moneys available for payment of the 2012 Series ABC Bonds.

The SFPUC is not obligated to pay the principal of, premium, if any, or interest on the 2012 Series ABC Bonds except from Revenues of the Water Enterprise. The SFPUC has no taxing power. The General Fund of the City is not liable for the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds, and neither the credit nor the taxing power of the City is pledged to the payment of the principal of, premium, if any, or interest on the 2012 Series ABC Bonds. The 2012 Series ABC Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any property of the City or of the SFPUC or any of its income or receipts, except Revenues.

#### **Limitations on Rate-Setting**

The generation of Revenues sufficient to satisfy the requirements of the Indenture and to pay the principal of and interest on the 2012 Series ABC Bonds will require the SFPUC to raise the water rates payable by its customers. The increase or maintenance of retail water rates is subject to various substantive and procedural requirements and limitations. See "FINANCIAL OPERATIONS—Retail Water Sales Revenue" and "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS."

Water rates payable by the Wholesale Customers are established under the Water Supply Agreement, which will help reduce the risk that Revenues will be insufficient for the purposes described in this section. Rates established pursuant to the Water Supply Agreement are subject to the substantive requirements and the procedures, including procedures for resolving disputes, of applicable law and as set forth in the Water Supply Agreement. The Water Supply Agreement also provides for rate adjustments for drought and non-drought emergencies if needed. See "FINANCIAL OPERATIONS—Wholesale Water Sales Revenue" and "APPENDIX C—SUMMARY OF CERTAIN PROVISIONS OF THE WATER SUPPLY AGREEMENT."

#### Initiative, Referendum, Charter Amendments and Future Legislation

Under the State Constitution, the voters of the State have the ability to initiate legislation and require a public vote on legislation passed by the State Legislature through the powers of initiative and referendum, respectively. Under the Charter, the voters of the City have similar powers, and can restrict or revise the powers of the SFPUC through the approval of a Charter amendment, or can exercise the powers of the SFPUC through adoption of an initiative ordinance. In general, the SFPUC is unable to predict whether any such initiatives might be submitted to or approved by the voters, the nature of such initiatives, or their potential impact on the SFPUC or the Water Enterprise. See "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS."

For example, a proposed ballot initiative ordinance to require a "Water Sustainability and Environmental Restoration" planning process was submitted to the San Francisco Department of Elections in March 2012, as the first formal step in the process to qualify that initiative ordinance for the San Francisco ballot in November 2012. See "FUTURE WATER DEMAND AND SUPPLY – Proposals to Restore Hetch Hetchy Valley".

In addition, the SFPUC is subject to various laws, rules and regulations adopted by the local, State and federal governments and their agencies. The SFPUC is unable to predict the adoption or amendment of any such laws, rules or regulations, or their effect on the operations or financial condition of the SFPUC.

#### **Risks Related to Water Enterprise Facilities and Operations**

The operation of the Water Enterprise, and the physical condition of the Water Enterprise facilities, are subject to a number of risk factors that could adversely affect the reliability of the SFPUC's water supply, or increase the operating expenses of the Water Enterprise. Prolonged damage to the Water Enterprise could interrupt the ability of the SFPUC to realize Revenues sufficient to pay principal of and interest on the 2012 Series ABC Bonds, or require the SFPUC to increase expenditures for repairs significantly enough to adversely impact the SFPUC's ability to pay the principal of or interest on the 2012 Series ABC Bonds. These factors could include, among others, the following.

Aging Facilities. Certain of the Water Enterprise's facilities are near the end of their useful life. Long-lived facilities result in decreased reliability due to unplanned outages and place a greater maintenance burden on SFPUC operations. In addition, the vulnerabilities of the Regional Water System are increased by its linear nature and lack of redundancy. Outages at critical points could disrupt delivery to large portions of the Regional Water System. The WSIP has been designed in part to reduce vulnerability of the Regional Water System and increase reliability of the system to deliver water by improving redundancy needed to accommodate planned outages for maintenance and unplanned outages resulting from facility failure. See "WATER SYSTEM IMPROVEMENT PROGRAM" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

*Seismic Hazards.* The Water Enterprise's distribution and transmission systems and the facilities of the Hetch Hetchy Project (as hereinafter defined) are located in seismically active regions of the State, and cross three major known active fault zones (the San Andreas Fault, the Hayward fault and the Calaveras Fault). See "WATER FACILITIES – Seismic Hazards."

**Other Natural and Man-Made Disasters.** Other natural disasters, including without limitation wildfires, flooding and landslides, or man-made disasters, including without limitation natural gas pipeline failures or explosions, could interrupt operation of the Hetch Hetchy Project or the Regional Water System.

*Statutory and Regulatory Compliance.* The operation of the Water Enterprise is subject to a variety of federal and State statutory and regulatory requirements concerning matters such as water quality, dam safety, instream fishery flows and endangered species. SFPUC's failure to comply with applicable laws and regulations could result in significant fines and penalties. In addition to claims by private parties, changes in the scope and standards for public agency water systems such as the Water Enterprise may also lead to administrative orders issued by federal or State regulators. Future compliance with such orders could also impose substantial additional operating expenses on the Water Enterprise. See "REGULATORY MATTERS."

**Proposals to Dismantle Hetch Hetchy Reservoir.** Various environmental advocates have from time to time proposed the dismantling of Hetch Hetchy Dam with the aim of draining Hetch Hetchy reservoir and restoring the river valley, most recently through a ballot initiative ordinance to require a planning process for the restoration of Hetch Hetchy Valley that has been proposed for the November 2012 election. Any such proposals, if implemented, would impose substantial additional operating and capital expenses on the Water Enterprise. See "FUTURE DEMAND AND SUPPLY – Proposals to Restore Hetch Hetchy Valley."

**Casualty Losses.** The SFPUC's risk management program includes both self-insured and insured coverages; however, the program does not provide coverage for every conceivable risk of loss. Damage attributable to seismic events and environmental pollution are excluded. In situations where the SFPUC has not purchased commercial coverage, the Water Enterprise has a 'self-retention' program that it administers and retains budgeted resources internally to provide coverage for loss liabilities. See also "FINANCIAL OPERATIONS – Risk Management and Insurance." The SFPUC is not required to either insure against or self-insure against every potential risk of loss, and there is a risk that damage or destruction of property and equipment comprising the Water Enterprise could occur for which no insurance or self-insurance funds will be available. There can be no assurance that insurance providers will pay claims under any policies promptly, or at all, should a claim be made under such policies in connection with property loss or damage. It is possible that an insurance provider will refuse to pay a claim, especially if it is substantial, and force the SFPUC to sue to collect on or settle the insurance claim. Further, there can be no assurances that any insurance proceeds will be sufficient to rebuild or replace any damaged property. The SFPUC is authorized under the Water Supply Agreement to adopt emergency rate increases which helps to mitigate this risk.

**Drought.** The State is located in a semi-arid region and is subject to periodic drought. An extended drought could adversely affect the ability of the SFPUC to deliver water sufficient to satisfy all of the demands of its customers. If the SFPUC were to deliver less water to its customers, the SFPUC would need to increase the rates payable by customers or Revenues would decline. The SFPUC may also seek to acquire, and would be obligated to pay the cost of, additional water to deliver to its customers. The SFPUC has adopted a drought planning sequence and associated operating procedures respecting the delivery of water during a drought. The SFPUC is authorized under the Water Supply Agreement to adopt drought surcharges if needed. See "THE WATER ENTERPRISE—Water Supply Reliability and Drought Planning."

**Safety and Security.** Military conflicts and terrorist activities may adversely impact the operations of the Water System or the finances of the SFPUC. The SFPUC continually plans and prepares for emergency situations and immediately responds to ensure services are maintained. See "WATER FACILITIES – Safety and Security." However, there can be no assurance that any existing or additional safety and security measures will prove adequate in the event that terrorist activities are directed against the assets of the Water Enterprise or that costs of security measures will not be greater than presently anticipated.

# Cost of the WSIP; Timely Completion of the WSIP

The WSIP is a major capital improvement program significantly larger in scope than any capital improvement program previously undertaken by the SFPUC. The completion of various portions of the WSIP could be delayed and the overall cost of the WSIP could be increased for a variety of reasons, including, but not limited to, actions by State or federal regulatory agencies, voter initiatives, legal challenges on environmental or other grounds, prolonged contractor disputes, unanticipated geologic or soil conditions, or the occurrence of an earthquake or other natural disaster. See "WATER SYSTEM IMPROVEMENT PROGRAM" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

The SFPUC has financed and intends to finance the WSIP through the issuance of bonds and other indebtedness. If the WSIP is completed at the cost and on the schedule presently anticipated by the SFPUC, the cost of the WSIP will require a significant planned increase in the amount of debt payable from Revenues, which will result in significant planned rate increases for Wholesale Customers and Retail Customers. Correspondingly, debt service coverage for the Bonds will also be significantly lower than it is currently or has been historically. Were the WSIP delayed or the cost of the WSIP to increase, the SFPUC would be required either to incur more debt payable from Revenues or to cash fund those costs from Revenues and increase water rates payable by SFPUC customers to levels higher than presently anticipated by the SFPUC, which could result in lower debt service coverage ratios than presently anticipated by the SFPUC. See "FINANCING OF THE WATER SYSTEM IMPROVEMENT PROGRAM" and "PROJECTED OPERATING RESULTS."

Over the next several years the SFPUC expects to issue approximately \$1.3 billion in revenue bonds (including the 2012 Sub-Series A Bonds) to fund the WSIP. The issuance by the SFPUC of revenue bonds is subject to various approval requirements. See "OBLIGATIONS PAYABLE FROM REVENUES."

The ability of the SFPUC to issue additional revenue bonds to finance the WSIP may also be adversely affected by any adverse change in the financial position of the SFPUC or by general market conditions. There can be no assurance that the SFPUC will be able to issue revenue bonds in an aggregate amount sufficient to finance all of the costs of completing the WSIP.

#### **Bankruptcy or Financial Failure of Wholesale Customers**

The financial failure or bankruptcy of a Wholesale Customer could adversely affect the ability of such Wholesale Customer to honor its obligation under the Water Supply Agreement (including its obligation to pay the purchase price of water delivered by the SFPUC to such Wholesale Customer).

The SFPUC is not aware of the existing or impending financial failure or bankruptcy of any Wholesale Customer, but there can be no assurance that a financial failure or bankruptcy of a Wholesale Customer will not occur. If a Wholesale Customer were to become bankrupt, the SFPUC may be unable to enforce the terms of the Water Supply Agreement against such Wholesale Customer and the SFPUC's right to receive payment for water delivered prior to bankruptcy but not invoiced or invoiced but not paid may be limited to the rights of an unsecured creditor of the bankrupt entity. Further, there can be no assurance that the SFPUC will be physically able or legally permitted to cease or interrupt deliveries of water to a non-paying Wholesale Customer.

Although no assurance can be provided, the SFPUC believes that any reduction in Revenues as a result of the inability to collect payment for water delivered to a bankrupt Wholesale Customer or as a result of any temporary interruption or reduction of water deliveries will not be material. The SFPUC further believes that, following such bankruptcy, the amount of water delivered for the service area currently served by such Wholesale Customer will not be reduced and that the SFPUC will be able to obtain payment for such water on terms comparable to the terms of the Water Supply Agreement.

# **Limitations on Remedies**

The remedies available to the owners of the 2012 Series ABC Bonds upon the occurrence of an event of default under the Indenture in many respects depend upon judicial actions which are themselves often subject to discretion and delay and could prove both expensive and time consuming to obtain. In addition to the limitations on remedies contained in the Indenture, the rights and obligations under the 2012 Series ABC Bonds and the Indenture may be subject to bankruptcy, insolvency, 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 limitations on legal remedies against charter cities and counties in the State.

The opinions to be delivered by Co-Bond Counsel, concurrently with the issuance of the 2012 Series ABC Bonds, that the 2012 Series ABC Bonds constitute valid and binding limited obligations of the SFPUC and the Indenture constitutes a valid and binding obligation of the SFPUC will be subject to such limitations and the various other legal opinions to be delivered concurrently with the issuance of the Bonds will be similarly qualified. See "APPENDIX F—PROPOSED FORM OF OPINION OF CO-BOND COUNSEL."

If the SFPUC fails to comply with its covenants under the Indenture or to pay principal of or interest on the 2012 Series ABC Bonds, there can be no assurance of the availability of remedies adequate to protect the interests of the holders of the 2012 Series ABC Bonds.

#### Loss of Tax Exemption/Risk of Tax Audit of Municipal Issuers

As discussed under "TAX MATTERS," interest on the 2012 Series ABC Bonds could fail to be excluded from the gross income of the owners thereof for purposes of federal income taxation retroactive to the date of the issuance of the 2012 Series ABC Bonds as a result of future acts or omissions of the SFPUC in violation of its covenants to comply with requirements of the Internal Revenue Code of 1986, as amended. Should such an event of taxability occur, the 2012 Series ABC Bonds are not subject to special redemption or any increase in interest rate and will remain outstanding until maturity or until redeemed under one of the redemption provisions contained in the Indenture.

The Internal Revenue Service has initiated an expanded program for the auditing of tax-exempt securities issues, including both random and target audits. It is possible that the 2012 Series ABC Bonds will be selected for audit by the Internal Revenue Service. It is also possible that the market value of the 2012 Series ABC Bonds might be affected as a result of such an audit of the 2012 Series ABC Bonds (or by an audit of similar securities).

#### Secondary Market

There can be no guarantee that there will be a secondary market for the 2012 Series ABC Bonds or, if a secondary market exists, that the 2012 Series ABC Bonds can be sold for any particular price. Occasionally, because of general market conditions or because of adverse history or economic prospects connected with a particular issue, secondary marketing practices in connection with a particular issue are suspended or terminated. Additionally, prices of issues for which a market is being made will depend upon then prevailing circumstances. Such prices could be substantially different from the original purchase price.

# THE CITY AND COUNTY OF SAN FRANCISCO

The City is the economic and cultural center of the San Francisco Bay Area and northern California. The corporate limits of the City encompass over 93 square miles, of which 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay (the "Bay"). The City is located at the northern tip of the San Francisco Peninsula, bounded by the Pacific Ocean to the west, the Bay to the east, the entrance to the Bay and the Golden Gate Bridge to the north, and San Mateo County to the south. Silicon Valley is about a 40-minute drive to the south, and the wine country is about an hour's drive to the north. The California Department of Finance Demographic Research Unit estimated the City's population at 812,538 as of January 1, 2012.

The San Francisco Bay Area consists of the nine counties contiguous to the Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties (collectively, the "Bay Area"). The economy of the Bay Area includes a wide range of industries, supplying local needs as well as the needs of national and international markets. Major business sectors in the Bay Area include retail, entertainment and the arts, conventions and tourism, service businesses, banking, professional and financial services, corporate headquarters, international and wholesale trade, multimedia and advertising, biotechnology and higher education.

THE GENERAL FUND OF THE CITY IS NOT LIABLE FOR THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2012 SERIES ABC BONDS, AND NEITHER THE CREDIT NOR THE TAXING POWER OF THE CITY IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON THE 2012 SERIES ABC BONDS. THE 2012 SERIES ABC BONDS ARE NOT SECURED BY A LEGAL OR EQUITABLE PLEDGE OF, OR CHARGE, LIEN, OR ENCUMBRANCE UPON, ANY OF THE PROPERTY OF THE CITY.

# THE PUBLIC UTILITIES COMMISSION

# General

The SFPUC is a department of the City responsible for the maintenance, operation and development of three utility enterprises: the Water Enterprise, the Wastewater Enterprise and the Power Enterprise (which is a component of Hetch Hetchy Water and Power).

• The Water Enterprise provides drinking water to Retail Customers in the City, to certain Retail Customers outside the City and to Wholesale Customers in three other Bay Area counties.

• The Wastewater Enterprise provides wastewater and stormwater collection, treatment and disposal services for the City (the "Wastewater Enterprise").

• Hetch Hetchy Water and Power operates dams (including O'Shaughnessy Dam), reservoirs (including Hetch Hetchy Reservoir), hydroelectric generation and transmission facilities and water transmission facilities from Hetch Hetchy Valley to the connection with the Water Enterprise (collectively, the "Hetch Hetchy Project"). In addition, Hetch Hetchy Water and Power provides hydroelectric, solar and other power for municipal and public infrastructure, services and facilities (the "Power Enterprise"). The SFPUC's enterprises are operated and managed as separate financial entities with separate enterprise funds.

The revenues of the Wastewater Enterprise and Hetch Hetchy Water and Power, including the Power Enterprise, are not available for payment of the principal of, premium, if any, or interest on the Bonds. See "SECURITY FOR THE BONDS—Pledge of Revenues."

#### **Organization, Purposes and Powers**

*Water Enterprise*. Nearly 2.5 million people rely on water supplied by the SFPUC to meet their daily water needs through its Water Enterprise. The SFPUC serves as the retail water supplier for the City and is responsible for water deliveries to residents and institutions within the city limits, as well as to a number of retail accounts outside of the City limits. In addition, the SFPUC sells water to 27 Wholesale Customer entities in San Mateo, Alameda and Santa Clara Counties under contractual agreements. Collectively, with the exception of the Cordilleras Mutual Water Association, the Wholesale Customers constitute BAWSCA, which is a public agency separate and apart from the 27 Wholesale Customers. See "THE WATER ENTERPRISE."

The Water Enterprise consists of over 280 miles of pipeline, over 60 miles of tunnels, 11 reservoirs, five pump stations, and two water treatment plants located outside of the City (the "Regional Water System") and over 1,250 miles of pipeline, 12 reservoirs, nine storage tanks, 12 pump stations, eight hydropneumatic stations and 17 chlorination stations located within the city limit of the City (the "In-City Distribution System").

The Regional Water System draws approximately 85% of its water from the Upper Tuolumne River Watershed, collected in the Hetch Hetchy Reservoir in Yosemite National Park, feeding a single aqueduct system, delivering water 120 miles by gravity to Bay Area reservoirs and users. The remaining water supply is drawn from local surface waters in the Alameda and Peninsula watersheds.

Approximately 66% of the SFPUC's water supply is delivered to the Wholesale Customers, and Retail Customers represent the remaining 34% of water deliveries.

*Hetch Hetchy – Water and Power Operations*. Hetch Hetchy Water and Power operates the Hetch Hetchy Project, which provides water for distribution through the Water Enterprise and hydroelectric power to the Power Enterprise. The Power Enterprise, which is a component of the Hetch Hetchy Water and Power Project, was created in February 2005 as a separate system within Hetch Hetchy Water and Power. The Power Enterprise focuses on providing adequate and reliable supplies of electric power to meet the municipal requirements of the City, including power to operate municipal streetcars and electric buses, street and traffic lights, municipal buildings and other City facilities, including San Francisco International Airport. Additionally, the Power Enterprise provides power to the Modesto and Turlock Irrigation Districts (collectively, the "Districts"), located in the central valley of California, and to other commercial customers consistent with prescribed contractual obligations and federal law.

The costs of operating the Hetch Hetchy Project (including both operating costs and capital costs) are allocated between the Power Enterprise and the Water Enterprise. Costs allocated to the Water Enterprise are paid through an inter-enterprise transfer from the Water Enterprise to Hetch Hetchy Water and Power. Such transfers constitute "Operation and Maintenance Costs of the Enterprise." See "FINANCIAL OPERATIONS – Operating and Maintenance Expenses" and "—Inter-Enterprise Transfers."

The revenues of Hetch Hetchy Water and Power are not "Revenues" under the Indenture and do not secure the payment of the principal of, premium, if any, or interest on the Bonds. See "SECURITY FOR THE BONDS—Pledge of Revenues."

*Wastewater Enterprise*. The Wastewater Enterprise's collection and treatment system consists of a combined sewer collection system conveying wastewater and stormwater flows within the City to three water pollution control plants, also located within the City. Treated effluent flows are then discharged through deep-water outfalls into the San Francisco Bay and Pacific Ocean. The Enterprise also operates wastewater treatment facilities on Treasure Island pursuant to a "caretaker" contractual agreement and certain lease agreements between the Treasure Island Development Authority and the U.S. Navy.

The revenues of the Wastewater Enterprise are not "Revenues" under the Indenture and do not secure the payment of the principal of, premium, if any, or interest on the Bonds. See "SECURITY FOR THE BONDS—Pledge of Revenues."

# **Commission Members**

Under the Charter, the SFPUC is given exclusive charge of the operation and management of all water, wastewater and municipal customers' energy supplies and utilities of the City as well as the real, personal and financial assets under the SFPUC's jurisdiction. The SFPUC is governed by the Commission.

In June 2008, an initiative measure amended the Charter, changing the process for Commission appointments, and establishing qualifications for commissioners, as follows:

• The Commission consists of five members appointed by the Mayor, subject to confirmation by a majority of the Board of Supervisors.

• Seat 1 is designated for a member with experience in environmental policy and an understanding of environmental justice issues.

• Seat 2 is designated for a member with experience in ratepayer or consumer advocacy.

• Seat 3 is designated for a member with experience in project finance.

• Seat 4 is designated for a member with expertise in water systems, power systems, or public utility management.

• Seat 5 is designated for an at-large member.

• In order to stagger the terms of the commissioners, the members appointed to Seats 2 and 4 served for an initial term of two years from August 1, 2008. The remaining three members appointed to Seats 1, 3, and 5 served for an initial term of four years from August 1, 2008. Thereafter, the terms of all members are four years.

• Members may be suspended by the Mayor and may be removed by a three-fourths vote of the Board of Supervisors for official misconduct.

The current members of the Commission and the appointment and expiration dates of their terms are:

Name and Title	Seat	Originally Appointed	Term Expires
Anson Moran, President	4	July 2009	August 2014
Art Torres, Vice President	2	November 2010	August 2014
Ann Moller Caen	3	March 1997	August 2012
Vince Courtney	5	January 2011	August 2012
Francesca Vietor	1	September 2008	August 2012

# Management

Management of the SFPUC is led by the General Manager. The General Manager is appointed by the Mayor from candidates submitted by the Commission. Once appointed by the Mayor, the General Manager serves at the pleasure of the Commission; however, the Commission also has Charter authority to employ the General Manager under an individual contract.

Brief biographies of the General Manager and principal members of the senior management of the SFPUC are set forth below.

*Edward M. Harrington*. Ed Harrington is General Manager of the SFPUC. Mr. Harrington was nominated for the role of General Manager by then-Mayor Gavin Newsom in January 2008 and was approved by the Commission in March 2008. From 1991 to 2008, Mr. Harrington served as the Controller of the City, where he administered the City's then \$6.1 billion budget. Mr. Harrington's responsibilities as Controller included receiving

and disbursing City funds, estimating the cost of ballot measures, providing payroll services for the City's then 28,000 employees, issuing the City's financial statements and directing performance and financial audits of City activities. Before becoming Controller, Mr. Harrington was the Assistant General Manager and Finance Director of the SFPUC and was responsible for the financial activities for the Muni Railway, Water Department and Hetch Hetchy Water and Power System. Mr. Harrington is a Certified Public Accountant. In 2003 he was elected President of the Government Finance Officers Association of the United States and Canada. Until 2008, he served as President of the California State Association of County Auditors. In 2008, Mr. Harrington was elected to the Board of Trustees of the Financial Accounting Foundation which oversees the activities of the Governmental Accounting Standards Board ("GASB") and the Financial Accounting Standards Board ("FASB"). In March 2012 Mr. Harrington received a Lifetime Achievement Award from the Municipal Fiscal Advisory Committee, a project of San Francisco Planning and Urban Research (SPUR). Mr. Harrington attended the University of San Francisco and received his B.A. in Accounting from San Francisco State University.

In February 2012 Mr. Harrington announced his retirement, and is serving on contract through August 31, 2012, with an option to extend until December 31, 2012. The SFPUC has begun an extensive recruitment process including the engagement of the services of an executive search firm to identify qualified candidates. It is anticipated that successful candidates will be identified by July 2012, and the new appointment authorized by September 2012.

*Michael Carlin*. Michael Carlin is the SFPUC Deputy General Manager. Mr. Carlin has worked for the SFPUC since 1996 and served from 2004 through 2009 as Assistant General Manager for Water. Since 2009 he has served as Deputy General Manager. Mr. Carlin acts as Chief Operating Officer of the SFPUC, reporting directly to the General Manager, and oversees the agency's efforts to integrate Asset Management, Supervisory Control & Data Acquisition, Work Order Writing & Tracking, Security and other systems and functions across the Water, Wastewater and Power Enterprises and throughout the organization. Mr. Carlin also plays a leading role in overseeing new initiatives and the many environmentally innovative "green" projects that cut across enterprises within the SFPUC, including a comprehensive agency approach towards confronting and adapting to the impacts of climate change. He joined the SFPUC as the Water Resources Planning Manager in 1996. Prior to joining the City, he was the Chief of Planning for the San Francisco Bay Regional Water Quality Control Board. Mr. Carlin holds a B.A. in Biology from San Francisco State University and an M.P.A. with an emphasis in Environmental Management from Golden Gate University.

Todd L. Rydstrom. Todd Rydstrom serves as the Assistant General Manager and Chief Financial Officer of the SFPUC, where he manages the Business & Financial Services Bureau comprised of 300 staff in Customer Service, Information Technology, Finance, Human Resources, Fleet Management, and Assurance & Internal Controls. Prior to joining the SFPUC in June 2008, Mr. Rydstrom served as the Director of Budget, Analysis & Accounting Reconciliation in the Controller's Office, where he managed the City's then \$6.1 billion Budget, Revenue, Property Tax, Accounting Reconciliation and Office of Economic Analysis functions. In 2006, Mr. Rydstrom was awarded the Public Managerial Excellence Award for outstanding public service in the City. Prior to joining the City Controller's Office in November 2001, Mr. Rydstrom served as the City of Oakland's Acting Budget Director and Principal Financial Analyst. Mr. Rydstrom has over twenty years of experience in investment and government finance. His work experience includes investment operations and business development with The Principal Financial Group, one of the largest Fortune 500 pension fund companies in the U.S., as well as public sector finance and budgeting with Bay Area governments including the City of Emeryville, the City of Oakland, and the City and County of San Francisco. In 2009, Mr. Rydstrom was appointed to the San Francisco Treasury Oversight Committee, which oversees the City and County of San Francisco Treasury holdings and investment policy. Mr. Rydstrom received his M.P.P. from the Goldman School of Public Policy at the University of California, Berkeley where he was awarded the Smolensky Prize for Outstanding Advanced Policy Analysis for his work titled Municipal & Redevelopment Strategic Fiscal Planning. He earned his undergraduate degree in Investment Finance from Iowa State University.

*Steven R. Ritchie.* Steven Ritchie is the Assistant General Manager of the Water Enterprise, responsible for overseeing water system operations and planning from Hetch Hetchy through the Regional Water System to the City Distribution Division. He is also responsible for the management of the SFPUC's lands and natural resources. Mr. Ritchie was the Manager of Planning at the SFPUC from 1995 to 1998. Prior to his current assignment, he managed the South Bay Salt Pond Restoration Project, a multi-agency effort to restore 15,100 acres of valuable

habitat in South San Francisco Bay, while providing for flood risk management and public access. In addition, Mr. Ritchie has worked at management positions at the San Francisco Bay Regional Water Quality Control Board (1987-1995), the CalFed Bay-Delta Program (1998-2000), and URS consultants (2000-2004). He has a B.S. and M.S. in Civil Engineering from Stanford University.

Juliet Ellis. Juliet Ellis, Assistant General Manager for External Affairs, is the primary spokesperson for the SFPUC and is responsible for the SFPUC's communications, outreach, education, environmental and legislative matters. Ms. Ellis served as a Commissioner on the SFPUC from December 2008 until October 2010, focusing on the Commission's consumer and rate payer advocacy efforts. Ms. Ellis also served as Executive Director of Urban Habitat (UH), a regional social and environmental justice organization, where Ms. Ellis worked in partnership with low-income communities and communities of color to advance social, economic, and environmental justice in the Bay Area region. Through advocacy and the promotion of equitable policies, leadership development, research, and participation in strategic coalitions. Urban Habitat helps to build a democratic society in which all communities have the power to influence and benefit from the decisions impacting their neighborhoods. Prior to becoming Executive Director for UH, Ms. Ellis was the Associate Program Officer for Neighborhood and Community Development at The San Francisco Foundation. She was responsible for all aspects of grantmaking in the areas of workforce development, housing, homelessness, economic development, community development, and neighborhood planning. Ms. Ellis has served on numerous regional and local boards and committees, including the Oakland Homeless and Low-Income Taskforce, the San Francisco Asset Building Initiative, the Alameda Continuum of Care Council, the Alameda County Public Health Disparities Taskforce, the Community Capital Investment Initiative, Girls After School Academy, the Ella Baker Center for Human Rights, and the San Francisco School of Volunteers. She currently serves on the Board and Steering Committee of the Green for All, the David Brower Center, and the Partnership for Working Families. Ms. Ellis has an M.S. in Business Administration from San Francisco State University and a B.S. in Marketing from Ball State University.

**Barbara Hale**. Barbara Hale is Assistant General Manager of the Power Enterprise. Ms. Hale oversees the Power Enterprise, including Power Retail Services, Utilities Services, Regulatory Affairs, Infrastructure Development and Power Purchasing and Scheduling. She is responsible for the development of a strategic business plan for the organization, setting out priorities, objectives, schedules and policy issues. Ms. Hale oversees all power-related inter-governmental relations, works directly with the Commission on policy and capital matters, and provides direction and leadership to a multi-discipline staff at remote and downtown locations. Ms. Hale provides strategic advice on energy policy matters to the General Manager and manages a staff responsible for developing specific energy efficiency projects and renewable and other advanced sources of electrical generation. Ms. Hale also acts as liaison between the SFPUC and State and federal agencies responsible for energy policy, such as the California Public Utilities Commission, the California Energy Commission, the California Power Authority, the Federal Energy Regulatory Commission, and the United States Department of Energy. Ms. Hale graduated cum laude from San Francisco State University with a B.A. in Economics, receiving special recognition for high achievement with the Department Honors Award. Ms. Hale has pursued extensive graduate coursework in Applied Economics.

Harlan Kelly, Jr. Harlan Kelly, Jr. is the Assistant General Manager, Infrastructure, of the SFPUC. As head of Infrastructure, he oversees Project Management, Engineering Management, Construction Management, Program Controls, Environmental Management and Contracts Administration for capital programs. Mr. Kelly has over twenty-five years of engineering experience including eighteen years in management capacities. He began his career in the mid-1980s in the San Francisco Department of Public Works where he advanced to progressively responsible positions in both functional and project management. In 1996, then-Mayor Willie Brown, Jr. appointed Mr. Kelly to the position of City Engineer of San Francisco, as well as Public Works Deputy Director. At the age 34, Mr. Kelly was the youngest person and first African American in the City's history to serve in this leadership role. He also served as the Acting Director of Public Works for an interim period beginning in May 2000. As City Engineer, Mr. Kelly managed the Bureaus of Engineering, Architecture, Construction Management, and Street Use and Mapping, which included engineering design, sewer design and repair, street construction, disability access for public structures, subdivision and mapping, permitting and geographic information systems. He also oversaw the design and construction of major City facilities and structures. Prior to his tenure as City Engineer, Mr. Kelly held a number of engineering positions at the Department of Public Works including Section Engineer, Resident Engineer, and Systems Manager. As a Project Manager, he led multiple projects for Public Health, Clean Water Program, Recreation and Park, and Earthquake Safety Bond Improvements. Mr. Kelly is a registered Professional Civil

Engineer and a graduate of the University of California at Berkeley. He is a member of the American Society of Civil Engineers and the National Society of Black Engineers. He is the recipient of the Eminent Engineer Award from the National Engineering Honor Society, the Stanley Lim Award from the San Francisco Human Rights Commission, and the Mayor's Fiscal Advisory Council Award for Excellence. In March 2012 Mr. Kelly received a Public Managerial Excellence Award from the Municipal Fiscal Advisory Committee, a project of San Francisco Planning and Urban Research (SPUR).

*Tommy T. Moala*. Tommy T. Moala is the Assistant General Manager of the Wastewater Enterprise which protects public health and safety through the collective treatment of raw sewage runoff. San Francisco's unique and award-winning combined sewer system treats on average more than 79 million gallons per day of sewage and stormwater during dry weather periods. Mr. Moala oversees operations, equipment and facilities maintenance, structural design and governmental compliance for the City's three wastewater treatment plants, 993-mile long sewer system and network of wastewater pumping stations. A former Naval Propulsion Engineer, Mr. Moala has more than 15 years experience in wastewater in-plant management. He began his 20-year career with the SFPUC as a Stationary Engineer, moving up steadily through the ranks to Senior Engineer, Chief Stationary Engineer and Operations Manager, and setting the Enterprise's standard for zero-violations along the way. A team recipient of the National Protection Agency O & M Award and the National Association of Clean Water Agency Award, Mr. Moala has also received then-Mayor Gavin Newsom's Public Managerial Excellence Award and the SFPUC O'Shaughnessy Award for organizing the SFPUC Emergency Response Team dispatched to Hurricane Katrina. He is a member of the Water Environment Federation, the California Water Environment Federation, the National Association of Clean Water Agencies and the American Water Works Association.

### **Employee Relations**

The SFPUC's operating budget for Fiscal Year 2011-12 includes annual funding for 1,616 full-time positions. Authorization exists for 2,221 full time positions for Fiscal Year 2011-12, which includes operations and capital budget positions in Infrastructure along with an assumption of vacant positions for salary savings.

The Charter governs the SFPUC's employment policies and authorizes the San Francisco Civil Service Commission to establish rules and procedures to implement those policies. Since 1976, the Charter has prohibited strikes by City employees. Pursuant to the Charter, employee organizations representing City workers are permitted to negotiate wages, hours, benefits and other conditions of employment through collective bargaining. The decision to elect collective bargaining is irrevocable. All SFPUC employees now bargain collectively. There are presently 14 labor unions representing SFPUC employees. Most SFPUC employees collectively bargain every three years. Conflicts between the employees and the City in collective bargaining are resolved by an arbitration board whose decision is final. There have been no strikes by City employees since the adoption of the strike prohibition in 1976.

The City is currently negotiating memoranda of understanding with several employee unions representing a majority of the SFPUC staff.

# THE WATER ENTERPRISE

#### Water Rights and Related Proceedings

Prior to the Gold Rush in 1849, local water supplies were largely adequate to meet the needs of what is now San Francisco. The Spring Valley Water Company, purchased by the City in 1930, developed much of the local water supplies now available to the Water Enterprise. The City's population grew rapidly after the Gold Rush to nearly 400,000 by the time of the Great Earthquake of 1906.

As early as the 1880s, the City began looking to the Sierra Nevada Mountains and the Tuolumne River in what is now Yosemite National Park as a possible source of abundant, clean water for the City and the Bay Area. Hetch Hetchy Valley, which is located on the Tuolumne River in Yosemite National Park, was first recommended as a reservoir site at the turn of the 20<sup>th</sup> Century in a U.S. Geological Survey Study. Then San Francisco Mayor James D. Phelan made the first filings for water rights and reservoir rights-of-way in the Tuolumne River watershed as a private citizen, transferring those filings to the City in 1903.

Following the 1906 earthquake, the City again sought water rights and reservoir rights-of-way in the Tuolumne River watershed and began to develop a preliminary design for the Hetch Hetchy System. It also entered into negotiations with the Modesto Irrigation District and the Turlock Irrigation District (the "Districts"), to protect the Districts' existing water rights and to provide them a share of the hydroelectric power to be produced by Hetch Hetchy facilities, at cost-based rates.

The federal Raker Act, enacted on December 19, 1913, grants to the City rights-of-way and public land use on U.S. government property in the Sierra Nevada Mountains to construct, operate and maintain reservoirs, dams, conduits and other structures necessary or incidental to developing and using water and power. It also imposes restrictions on the City's use of the Hetch Hetchy Reservoir, including (among others) the requirement that the City recognize the prior rights of the Districts to receive water, up to specified amounts of natural daily flow, for direct use and storage. After twenty years of construction of dams and aqueducts, water from the Hetch Hetchy System was first delivered to the City on October 24, 1934.

The City holds rights of way under the Raker Act and releases water from its facilities under stipulations with the United States Department of the Interior, which administers the Raker Act. The SFPUC diverts water under its water rights acquired under State water law, which entitle the SFPUC to appropriate in excess of 400 mgd<sup>1</sup> from the Tuolumne River and its tributaries.

See "- Current Water Supply Sources" and "FUTURE WATER DEMAND AND SUPPLY - Proposals to Restore Hetch Hetchy Valley".

# Wholesale Deliveries

*Wholesale Service Area and Customer Base*. The Water Enterprise provides wholesale water service to 27 Wholesale Customers, which consist of 25 public agencies, one private utility and one private non-profit university. All of the Wholesale Customers are located within the County of Alameda, the County of Santa Clara and the County of San Mateo.

• Alameda County is located on the east side of San Francisco Bay and extends from the Cities of Berkeley and Albany in the north to the City of Fremont in the south. The California Department of Finance Demographic Research Unit estimated Alameda County's population at 1,532,137 as of January 1, 2012. Most of its population is concentrated in a highly urbanized area between the San Francisco Bay and the East Bay Hills.

<sup>&</sup>lt;sup>1</sup> Million gallons per day.

• Santa Clara County lies immediately south of San Francisco and encompasses an area of approximately 1,316 square miles. Santa Clara County contains 15 incorporated cities, including the City of San Jose, the third largest city in the State. The California Department of Finance Demographic Research Unit estimated Santa Clara County's population at 1,816,486 as of January 1, 2012. Most of its population is concentrated in the extensively urbanized and heavily industrialized northern portion of the county.

• San Mateo County is located on the San Francisco Peninsula, west of the San Francisco Bay. San Mateo County covers 446 square miles and contains 20 incorporated cities. Coastal mountains run north and south, dividing the lightly populated western part of the county from the heavily populated eastern corridor between San Francisco and Santa Clara/Silicon Valley. The California Department of Finance Demographic Research Unit estimated San Mateo County's population at 729,443 as of January 1, 2012.

• Alameda County, Santa Clara County and San Mateo County all have diversified economies and median household incomes higher than State and national averages.

Collectively, the Wholesale Customers provide retail water service to approximately 1.76 million people in their respective service areas. Of the 27 Wholesale Customers, 14 derive 100% of their water from the SFPUC. All Wholesale Customers are billed monthly on the basis of metered water use and in accordance with the Water Supply Agreement.

The following is a list of the Wholesale Customers.

Municipalities	Water Purveying Districts	Private Entities
City of Brisbane	Alameda County Water District	California Water Service Company <sup>(1)</sup>
City of Burlingame	Coastside County Water District	Stanford University
City of Daly City	Cordilleras Mutual Water Association	
City of East Palo Alto	Estero Municipal Improvement District	
City of Hayward	Guadalupe Valley Municipal Improvement District	
City of Menlo Park	Mid-Peninsula Water District	
City of Millbrae	North Coast County Water District	
City of Milpitas	Purissima Hills Water District	
City of Mountain View	Westborough County Water District	
City of Palo Alto		
City of Redwood City		
City of San Bruno		
City of San Jose <sup>(2)</sup>		
City of Santa Clara <sup>(2)</sup>		
City of Sunnyvale		
Town of Hillsborough		

<sup>&</sup>lt;sup>(1)</sup> California Water Service Company, an investor-owned utility, provides water service to four separate districts: Bear Gulch (Atherton vicinity), San Carlos/San Mateo, South San Francisco and Skyline County Water District. California Water Service Company purchases nearly 15% of the water delivered annually by the SFPUC. Such purchases account for more than 10% of the SFPUC's yearly revenues.

(2) The SFPUC provides water on an interruptible basis to fixed service areas in the northern portions of the Cities of San Jose and Santa Clara. See "-Status of San Jose and Santa Clara" below.

**The Bay Area Water Supply and Conservation Agency**. BAWSCA is the successor agency to BAWUA. BAWUA was originally formed as a non-profit mutual benefit corporation to represent the Wholesale Customers' collective interests in their interactions with the SFPUC. Concerned that their needs and interests were not properly represented by the SFPUC, BAWUA lobbied for the creation of an entity with authority to plan for and acquire supplemental water supplies, encourage water conservation and use of recycled water on a regional basis, and assist in the financing of essential repairs and improvements to the Regional Water System. This lobbying resulted in the passage of three bills in 2002: AB 1823, which mandated that the SFPUC adopt a capital improvement program; SB 1870, which authorized a financing authority composed of the City and the Wholesale Customers, with the exception of Cordilleras Mutual Water Authority, to finance the Wholesale Customers' share of the capital improvement program; and AB 2058, which created BAWSCA on May 27, 2003.

BAWSCA is governed by a 26-member Board of Directors comprised of community leaders representing the 26 Wholesale Customers who are members of BAWSCA (the Cordilleras Mutual Water Association is served under the terms of the Water Supply Agreement, but is not a member of BAWSCA).

BAWSCA has the authority to coordinate water conservation, supply and recycling activities for its agencies; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the Regional Water System; and build facilities jointly with other local public agencies or on its own to carry out its purposes.

BAWSCA has not, to date, acquired water, financed projects or built facilities.

**Regional Water System Financing Authority.** Pursuant to SB 1870, the Wholesale Customers, together with the SFPUC, formed the San Francisco Bay Area Regional Water System Financing Authority ("RFA"). While BAWSCA focuses on planning and water management and may engage in public works projects, the RFA exists solely to help fund capital improvements to the Regional Water System. The RFA has the power to issue revenue bonds to fund projects to improve the reliability of the Regional Water System; provide proceeds of revenue bonds to the City under specified conditions to improve reliability of the system; and apply for and receive State and federal grants, loans and other financial assistance.

In accordance with SB 1870, debt service on any bonds issued by RFA in the future would be secured by, and paid from, a surcharge imposed by the City on behalf of the SFPUC upon Wholesale Customers and, under specific conditions prescribed by SB 1870, upon Retail Customers. This surcharge would be imposed in an amount sufficient to pay debt service on the RFA's bonds and its operating expenses. Proceeds of the surcharge would not constitute Revenues under the Indenture, and debt service on these bonds, if issued, would not be a debt or liability of the SFPUC or the City.

The RFA has not, to date, issued any revenue bonds, and the SFPUC is not now aware of any current plans by the RFA to do so. The ability of the RFA to issue bonds expires in December 2020.

*Prior Master Water Sales Contract*. Between 1984 and 2009, Wholesale Customer rates were set pursuant to a Settlement Agreement and Master Water Sales Contract (the "Master Water Sales Contract").

The Master Water Sales Contract resolved litigation over certain rate-setting practices. Both sides dismissed, with prejudice, the claims related to water sales overcharges and undercharges with the signing of the Master Water Sales Contract. However, the litigation left open certain questions, such as whether the Wholesale Customers are "Co-Grantees" under the Raker Act and, if so, what rights, benefits and privileges accrue to them by reason of such status, including the right to receive water at cost, and the extent to which the City may be legally obligated to provide water to meet growth demands in Wholesale Customer service areas.

The Master Water Sales Contract created a "Supply Assurance" of 184 mgd (measured on an annual average basis), in favor of 25 of the Wholesale Customers (the "Supply Assurance"), that survived the expiration of the Master Water Sales Contract. The Cities of San Jose and Santa Clara are served wholesale water on an interruptible basis and such sales are not deemed to be within the Supply Assurance. Twenty-four of the 25 wholesale customers within the Supply Assurance have individual supply guarantees within the 184 mgd. The City of Hayward does not have an individual supply guarantee as it had previously negotiated an individual contract that did not limit its water use. The City of Hayward continues to receive water under a contract entered into in 1960 with no expiration date or limitation in supply. Under the 184 mgd supply assurance, the 24 wholesale customers with individual supply guarantees would be required to reduce their allocation to accommodate the needs of the City of Hayward.

The Master Water Sales Contract put in place a comprehensive method for allocating the costs of the water system between the SFPUC's Retail Customers and the Wholesale Customers. All costs of Hetch Hetchy Water and Power associated solely with the Power Enterprise were the responsibility of the City. All costs of the in-City facilities and programs were allocated exclusively to the Retail Customers. Capital costs and most operations and maintenance expenses of the Regional Water System were distributed between the SFPUC and its Retail Customers and the Wholesale Customers based on proportional water usage: approximately one-third to the City and two-thirds to the Wholesale Customers. The Master Water Sales Contract authorized the SFPUC to recover capital costs using the "utility method" in which such costs are recovered over the useful life of underlying assets through charges for return and depreciation.

*Water Supply Agreement*. In 2009, the SFPUC and the Wholesale Customers entered into the Water Supply Agreement, with an effective date of July 1, 2009, which replaced the Master Water Sales Contract. The Water Supply Agreement has a 25-year term (with provisions for two conditional five-year extensions).

The Water Supply Agreement provides for the separation of asset and expense categories among wholesale only, regional, and retail only. Annual operations and maintenance expenses are recovered on the basis of proportionate annual use of the Regional Water System in most cases. Hetch Hetchy power costs and revenues are also separated—the Wholesale Customers do not pay for power-related costs, and do not share in power revenues.

The basic framework of the Master Water Sales Contract regarding coordination of wholesale rates with the annual SFPUC budget process, annual compliance audits, resolution of rate disputes via binding arbitration and the annual true up of costs using a balancing account continue, but the Water Supply Agreement effected significant changes in the arrangement between the SFPUC and the Wholesale Customers. The Water Supply Agreement includes the following significant changes.

*Allocation of Capital Costs*. Instead of continuing with the utility method, the Water Supply Agreement more timely recovers capital costs as follows:

• The costs of existing assets placed in service prior to June 30, 2009, with an estimated current balance of \$370 million, are repaid based on audited actual costs in monthly installments by Wholesale Customers at an annual interest rate of 5.13% over a 25-year period, in lieu of depreciation and a weighted return on these assets.

In light of the favorable interest rate environment, the Wholesale Customers have been in preliminary discussions with the SFPUC to repay early some or all of this obligation, pursuant to the provisions of the Water Supply Agreement. In anticipation of this possibility, the SFPUC has assumed the receipt of a \$50 million early repayment from the Wholesale Customers in Fiscal Year 2014-15; however, the actual early repayment amount could be different.

- The costs of new regional assets are to be paid for using the cash method. Annual wholesale rates are set to recover the Wholesale Customers' share of regional asset costs from current revenues for cash-funded assets. Wholesale contributions for debt-financed assets include appropriate contributions towards debt service and coverage based on the Wholesale Customers' proportionate annual use of the Regional Water System.
- For the portion of capital projects costs that were appropriated but not expended as of June 30, 2009, a 10-year repayment schedule including 4.00% interest has been calculated, based on audited actual costs.

For more information regarding the wholesale rate setting mechanism, see "FINANCIAL OPERATIONS— Wholesale Water Sales Revenue." *Treatment of Water Supply Issues.* The existing 184 mgd Supply Assurance continues in existence, as required in the Master Water Sales Contract. The Water Supply Agreement includes an "Interim Supply Limitation" which limits the amount of water delivered to the Retail Customers and Wholesale Customers from the SFPUC watersheds to 265 mgd through 2018. See "FUTURE WATER DEMAND AND SUPPLY."

Under the Interim Supply Limitation, Retail Customers will receive 81 mgd and the Wholesale Customers will receive 184 mgd from the Regional Water System. As part of the implementation of the Interim Supply Limitation, the SFPUC established the allocations of the 184 mgd to each of the Wholesale Customers, referred to as "Interim Supply Allocations," in 2010.

*Status of San Jose and Santa Clara*. The Cities of San Jose and Santa Clara retain their temporary, interruptible status. The SFPUC agrees to supply a combined annual average of nine mgd to the two cities through 2018. The nine mgd allocated to San Jose and Santa Clara is not a part of the Supply Assurance, but is included within the wholesale portion of the Interim Supply Limitation of 184 mgd.

The Water Supply Agreement requires the SFPUC to prepare and consider "Water Supply Development Reports" in the years 2010 through 2017. The annual Water Supply Development Reports are to be based on water projections and work plans for achieving the Interim Supply Limitation in retail and wholesale service areas. If the Water Supply Development Reports show that the Interim Supply Limitation will not be met by June 30, 2018 as a result of Wholesale Customer use in excess of 184 mgd, the SFPUC may issue a 5-year conditional notice of interruption or reduction in supply of water to San Jose and Santa Clara, at which point the SFPUC will prepare a new analysis of water supply that will be used by the Department of City Planning in preparing any necessary documentation under the California Environmental Quality Act ("CEQA") on the impacts of interrupting or reducing service to San Jose and Santa Clara. The notice of interruption in supply bevelopment Reports show that sufficient progress has been made toward meeting the Interim Supply Limitation by June 30, 2018. The 2011 Water Supply Development Report recommended against issuing a conditional 5-year notice of interruption or reduction in supply Limitation will be met by June 30, 2018.

*Creation of Transfer Market*. The Water Supply Agreement contemplates the creation of a water transfer market that enhances the Wholesale Customers' ability to keep purchases within the amounts of their respective Interim Supply Allocations. These transfers would remain in effect until rescinded by the transferring parties, and otherwise continue in force until December 31, 2018. In addition, Wholesale Customers may agree to the permanent transfer of portions of their Individual Supply Guarantees, their share of the 184 mgd Supply Assurance. All such transfers are subject to SFPUC approval regarding operational and Raker Act concerns.

**Enforcement of Interim Supply Limitation**. Commencing in Fiscal Year 2011-12, the SFPUC has established a volume-based "Environmental Enhancement Surcharge" to enforce the Interim Supply Limitation. The Environmental Enhancement Surcharge would apply only if combined retail and wholesale water deliveries from the Regional Water System watersheds exceed 265 mgd. Environmental Enhancement Surcharge proceeds will be placed in a restricted reserve fund to be used only for specific environmental restoration and enhancement measures in the SFPUC's Sierra and local watersheds, such as those identified in the Watershed Environmental Improvement Program. Specific restoration and enhancement projects would be selected by the SFPUC and BAWSCA, following input from environmental stakeholders and other interested members of the public. No surcharges have been imposed, and as discussed above, it appears unlikely that any surcharges will be imposed through 2018.

Other Significant Provisions. The Water Supply Agreement also contains the following provisions:

• The SFPUC agrees to operate system reservoirs in a manner that assigns higher priority to the delivery of water to the Bay Area and the environment than to generation of hydroelectric power.

- The "Shortage Allocation Plan," which establishes an allocation of water between the Retail Customers and Wholesale Customers to be applied during droughts, governs drought shortages of up to 20%.
- Drought pricing and emergency rate increases are allowed.

**2018 Water Supply Decisions.** Subject to completion of necessary CEQA review and the exercise of retained discretion by the SFPUC to reject or modify proposed projects, the Water Supply Agreement requires the SFPUC to make several decisions by December 31, 2018 as follows:

- Whether to make San Jose and Santa Clara permanent customers, to the extent that the SFPUC determines that long-term water supplies are available.
- Whether to provide water in excess of the Supply Assurance to meet wholesale demands through the year 2030, and whether to offer a corresponding increase in the Supply Assurance.

For a more detailed summary of the Water Supply Agreement, see "APPENDIX C—SUMMARY OF CERTAIN PROVISIONS OF THE WATER SUPPLY AGREEMENT."

*Individual Water Supply Contracts.* While the Water Supply Agreement establishes the rate-setting mechanism and the overall supply assurance level for Wholesale Customers, each Wholesale Customer has an individual water supply contract with the City that defines the terms and conditions (including, among others, the point of delivery and service area) by which water is supplied to each such Wholesale Customer.

# **Retail Deliveries**

**Retail Service Area and Customer Base.** The SFPUC's retail water customers include the residents, businesses and industries located within the corporate boundaries of the City. In addition to these customers, retail water service is also provided to other customers located outside of the City, such as the Town of Sunol, San Francisco International Airport, Lawrence Livermore Laboratory, Castlewood Country Club and Groveland Community Services District (collectively, the "Retail Customers"). All of the SFPUC's Retail Customers have been metered since 1916.

**Residential Water Use.** Due to the moderate climate and the high density housing in the City, much of the water use within the City is indoors. For multi-family units, the average outdoor water use is considerably lower than the statewide residential outdoor average water use of 50% to 60%.

*Non-Residential Water Use*. Non-residential water use includes all sectors of water users not designated as residential, such as manufacturing, transportation, trade, finance, and government employment sectors, and the large services sector.

# **Historic Water Sales and Top Customers**

*Water Sales*. The following table shows water sales to wholesale and retail customers for the five fiscal years ended June 30, 2007, through June 30, 2011.

# TABLE 1 HISTORIC WHOLESALE AND RETAIL WATER SALES FISCAL YEARS ENDED JUNE 30 (IN MGD)

	2007	2008	2009	2010	2011	2011 % of Total
Retail customers						
Residential	45.5	43.5	43.0	41.5	41.2	19.3%
Commercial	20.0	21.5	20.7	19.4	19.3	9.0%
Suburban Retail <sup>(1)</sup>	4.5	4.6	4.2	3.5	3.6	1.7%
Municipal <sup>(1)</sup>	1.0	4.1	4.3	4.0	3.6	1.7%
Industrial	0.2	0.2	0.2	0.2	0.2	0.1%
Docks & Shipping	0.0	0.0	0.1	0.0	0.0	0.0%
Retail water sales <sup>†</sup>	71.3	74.1	72.6	68.6	67.9	31.8%
Wholesale customers						
California Water Service	37.9	37.7	36.0	32.6	32.2	15.1%
Hayward Municipal Water	18.2	19.3	19.0	17.3	17.0	8.0%
City of Palo Alto	13.0	12.7	11.6	11.0	11.1	5.2%
City of Redwood City	11.7	11.0	10.3	9.6	9.1	4.3%
City of Mountain View	10.8	10.5	9.9	8.9	8.6	4.0%
City of Sunnyvale	9.4	10.5	10.7	9.9	8.1	3.8%
Alameda County Water	13.7	12.9	11.3	10.8	8.0	3.7%
City of Milpitas	6.9	7.0	6.9	6.3	6.1	2.8%
City of Daly City	6.2	4.5	4.4	5.1	5.3	2.5%
Estero Muni Improvement District	5.6	5.5	5.1	4.9	4.7	2.2%
All Other Wholesale Customers	42.4	41.7	38.8	35.0	35.5	16.6%
Wholesale water sales <sup>†</sup>	175.8	173.4	164.0	151.3	145.7	68.2%
Total water sales <sup>†</sup>	247.1	247.5	236.6	219.9	213.6	100.0%
% Change from prior year	4.6%	0.1%	-4.4%	-7.0%	-2.8%	
Unaccounted for water (2)	5.2	5.4	5.7	6.1		

<sup>†</sup> Totals may not add due to independent rounding.

(1) The Municipal category includes the San Bruno Jail, a City department located outside San Francisco. San Francisco International Airport was historically included as Municipal customer, but has been restated as a Suburban Retail customer because water sales represent resale to its tenants and not for its own consumption.

<sup>(2)</sup> Unaccounted for water includes water delivery system leaks and water not billed or tracked in the system (i.e., water used for fire fighting, flushing water system pipes). Unaccounted for water has averaged approximately 9% per year over the last 30 years.
 Source: SFPUC Comprehensive Annual Financial Report as of June 30, 2011.

As shown in the table above, water sales for Fiscal Years 2008-09, 2009-10 and 2010-11 declined due to factors that included increased water conservation, the local economy, and above-average precipitation. The SFPUC currently anticipates that water deliveries for Fiscal Year 2011-12 will decline another 2.0% to 2.5% from the prior Fiscal Year.

*Top Five Customers*. The following table sets forth the top five Wholesale and top five Retail Customers based on water sales revenues for Fiscal Year 2010-11.

	Water Sales Revenue (In Thousands)	Percent of Wholesale Customer Revenues	Percent of Retail Customer Revenues	Percent of all Water Revenues
Wholesale Customers				
Calif. Water Service Company	\$29,987	21.49%	N/A	10.70%
Hayward Muni Water System	15,957	11.44	N/A	5.69
City of Palo Alto	10,528	7.55	N/A	3.76
City of Redwood City	8,680	6.22	N/A	3.10
City of Mountain View	8,082	5.79	N/A	2.88
Total <sup>†</sup> :	\$73,234	52.49%	-	26.12%
Retail Customers				
SF International Airport (1)	\$2,462	N/A	1.75%	0.88%
University of California San Francisco	1,351	N/A	0.96	0.48
Parkmerced Investors Properties, LLC	1,079	N/A	0.77	0.38
Treasure Island (2)	1,022	N/A	0.73	0.36
NASA Shared Services Center, LLC	988	N/A	0.70	0.35
Total <sup>†</sup> :	\$6,902	N/A	4.90%	2.46%

# TABLE 2TOP FIVE WHOLESALE AND TOP FIVE RETAIL CUSTOMERSFISCAL YEAR ENDED JUNE 30, 2011

Totals may not add due to independent rounding.

(1) Represents water sales to customers through the City enterprise fund for San Francisco International Airport, which is paid through the City's inter-office billing system.

(2) Represents water sales to customers through the City's Treasure Island Project Office, which is measured through one master meter, and is paid through the City's inter-office billing system. Treasure Island has sub-meters where residents are charged for actual consumption.

Source: SFPUC Customer Information & Billing System.

# **Current Water Supply Sources**

*The Regional Water System*. The Regional Water System is a complex system which supplies water from two primary sources: the Tuolumne River through the Hetch Hetchy Reservoir and local runoff into Bay Area reservoirs in the Alameda and Peninsula watersheds. Water developed by Hetch Hetchy Reservoir through the Hetch Hetchy facilities represents the majority of the water supply available to the SFPUC. On average, the Hetch Hetchy Reservoir provides approximately 85% of the water delivered and Bay Area reservoirs provide approximately 15% of the water delivered. The local watershed facilities are operated to capture local runoff for delivery. Local area water production is dependent on precipitation and the ability of the SFPUC to regulate watershed runoff.

*Local Groundwater*. The City overlies all or part of seven groundwater basins: the Westside, Lobos, Marina, Downtown, Islais Valley, South and Visitation Valley basins. The Lobos, Marina, Downtown and South basins are located wholly within the City limits, while the remaining three extend south into San Mateo County. The portion of the Westside Basin aquifer located within the City is commonly referred to as the North Westside Basin. With the exception of the Westside and Lobos basins, all of the basins are generally inadequate to supply a significant amount of groundwater for municipal supply due to low yield.

Early in its history, the City made significant use of local groundwater, springs, and spring-fed surface water. However, after the development of surface water supplies in the Peninsula and Alameda watersheds by Spring Valley Water Company and the subsequent completion of the Hetch Hetchy Reservoir and aqueduct in the 1930's, the municipal water supply system has relied almost exclusively on surface water from local runoff, the Alameda and Peninsula watersheds, and the Tuolumne River watershed. Local groundwater use, however, has continued in the City primarily for irrigation purposes. The San Francisco Zoo and Golden Gate Park use groundwater for non-potable purposes.

About one mgd of groundwater is delivered to Castlewood Country Club from well fields operated by the SFPUC in Pleasanton and drawn from the Central Groundwater Sub Basin in the Livermore/Amador Valley. These wells are metered and have been in operation for several decades. There is no physical connection between the Castlewood wells and the Regional Water System. For purposes of water accounting and billing, these deliveries to Castlewood are accounted for as part of the SFPUC's Retail Customer base.

*Local Recycled Water*. From 1932 to 1981, the City's McQueen Treatment Plant provided recycled water to Golden Gate Park for irrigation purposes. Due to changes in regulations the City closed the McQueen plant and discontinued use of recycled water in Golden Gate Park. Currently, the City uses disinfected secondary-treated recycled water from the SFPUC's Southeast Water Pollution Control Plant on a limited basis for wash-down operations and provides it to construction contractors for dust control and other nonessential construction purposes. Current use of recycled water for these purposes in the City is less than one mgd.

*Local Water Conservation*. The SFPUC is committed to demand-side management programs; the City's per capita water use has dropped by about one-third since 1977 in part due to these programs. The first substantial decrease came following the 1976-77 drought in which gross per capita water use dropped from 160 to 130 gpcd.<sup>2</sup> Despite continuous growth in the City since then, water demands have remained lower than pre-drought levels.

A second substantial decrease in water use within the City occurred as a result of the 1987-92 drought, when a new level of conservation activities resulted in further water use savings. It is anticipated that through the continuation and expansion of these programs, per capita water use will continue to decrease into the future. Current gross per capita water use within the City is 89.8 gpcd, with residential water use calculated to be approximately 50.7 gpcd, one of the lowest per-capita rates of any major urban area in the State, and approximately one-half of the statewide average.

The SFPUC's demand management programs range from financial incentives for plumbing devices to improvements in the distribution efficiency of the system. The conservation programs implemented by the SFPUC are based on the California Urban Water Conservation Council's list of fourteen Best Management Practices identified by signatories of the Memorandum of Understanding Regarding Urban Water Conservation in California, executed in 1991.

# Water Supply Storage

The amount of water available to the SFPUC's Retail Customers and Wholesale Customers is constrained by hydrology, physical facilities, and the institutional parameters that allocate the water supply of the Tuolumne River. While in most years the SFPUC receives adequate water supply to meet its demands, due to these constraints, the SFPUC is very dependent on reservoir storage to firm up its water supplies. More importantly, reservoir storage provides the Regional Water System with year-to-year water supply carry-over capability. During dry years, the SFPUC has a very small share of Tuolumne River runoff available and the local Bay Area watersheds produce very little water. Reservoir storage is critical to the SFPUC during drought cycles since it enables the SFPUC to carry-over water supply from wet years to dry years. See "WATER FACILITIES—Water Storage."

<sup>&</sup>lt;sup>2</sup> Gallons per capita per day.

# Water Supply Reliability and Drought Planning

The SFPUC water supply system reliability is expressed in terms of its ability to deliver water during droughts. Reliability is defined by the amount and frequency of water delivery reductions required to balance customer demands with available supplies in droughts. The total amount of water the SFPUC has available to deliver to its Retail and Wholesale Customers during a defined period of time is dependent on several factors that include the amount of water that is available to SFPUC from natural runoff, the amount of water in reservoir storage, and the amount of water that must be released from the SFPUC's system for commitments to purposes other than customer deliveries (such as releases below Hetch Hetchy reservoir to meet Raker Act and fishery purposes).

The SFPUC operates its system to optimize the reliability and quality of its water deliveries. Hetch Hetchy Reservoir operations are guided by two principal objectives: collection of Tuolumne River water runoff for diversion to the Bay Area; and fulfillment of the SFPUC's downstream release obligations. To ensure water supply, Hetch Hetchy Project reservoirs remain high through the early winter, until sufficient snowmelt runoff is forecasted at 90% certainty to fill all Tuolumne reservoirs. When the forecasted snowmelt is certain to be in excess of the fill volume, the reservoirs may be drawn down through power operations to increase revenue without risking water supply.

Similarly, the Regional Water System Bay Area reservoirs are operated to conserve watershed runoff. As such, reservoirs are drawn down early in the winter period to capture storms and reduce the potential for spilling water out of the reservoirs. In the spring, Hetch Hetchy water (snowmelt) is often transferred to three of the Bay Area reservoirs that are capable of receiving the water so that any unused local reservoir storage is filled prior to July 1.

Prior to 1976-77, droughts did not seriously affect the ability of the SFPUC to sustain full deliveries to its customers. However, as the 1987-92 drought progressed and reservoir storage continued to decline, it became apparent that continued full deliveries could not be sustained without the risk of running out of water before the drought ended.

To provide some level of assurance that water could be delivered continuously throughout a drought (although at reduced levels), the SFPUC adopted a drought planning sequence and associated operating procedures that trigger different levels of water delivery reduction rationing relative to the volume of water actually stored in SFPUC reservoirs. Each year, during the snowmelt period, the SFPUC evaluates the amount of total water storage expected to occur throughout the Regional Water System. If this evaluation finds the projected total water storage to be less than an identified level sufficient to provide sustained deliveries during drought, the SFPUC may impose delivery reductions or rationing.

**Rationing.** At current delivery levels combined with current water supplies and reservoir storages, the Regional Water System can be expected to experience up to a 25% shortage from 15% to 20% of the time, over multiple-year drought sequences. During a drought, it is expected that the Retail and Wholesale Customers would experience a reduction in the amount of water received from the Regional Water System.

The amount of this reduction has been dictated by existing contractual agreements between the SFPUC and the Wholesale Customers, as detailed in the existing Water Shortage Allocation Plan ("WSAP"). The WSAP provides specific allocations of available water between the Retail and Wholesale Customers collectively associated with different levels of systemwide shortage. Under the WSAP, specific rationing amounts applied to the Retail and Wholesale Customers will be determined by their subsequent shortage plans as required to remain with their share of the systemwide allocation.

The WSAP has been carried forward in the Water Supply Agreement for systemwide shortages of up to 20%. For shortages in excess of this amount, the Water Supply Agreement provides that the SFPUC may allocate water in its discretion, subject to legal challenge by Wholesale Customers, if agreement cannot be reached regarding treatment of shortages in excess of 20%. The Water Supply Agreement also includes provisions for drought and emergency pricing. See "FINANCIAL OPERATIONS."

*System Delivery Capability*. System delivery capability is defined as the water delivery the Regional Water System is able to sustain over historical hydrologic conditions including multiple-year drought sequences. Under existing SFPUC operations policies and procedures, the SFPUC has a system delivery capability of 258 mgd. That is, the Regional Water System is capable of sustaining a 258 mgd annual average delivery over a hydrologic period equivalent to that experienced from 1921 to 2002 with shortages due to drought. After completion of the WSIP and development of dry-year supplies, the system delivery capability is anticipated to increase to 262 mgd. During non-drought years, the Regional Water System is capable of sustainably delivering 265 mgd.

#### **Current Water Supply Conditions**

*Water Year 2009-10.* Ample late-season precipitation and snowfall in the April and May of 2010 resulted in above-normal conditions as summer arrived.

Due to above-average conditions for the 2009-10 year, the SFPUC did not request any rationing from its customers, although the SFPUC continues to promote its customers' commitment to water conservation and best practices for water use.

*Water Year 2010-11.* October - December 2010 precipitation was well above normal, and the record at Hetch Hetchy (based on records starting in 1919), had rainfall that was 168% of average. A 6-week dry spell in January and early February caused water supply concerns, but in late February, storms resumed and resulted in an average rainfall for the month. March storms were over 200% of normal in both the Bay Area and Hetch Hetchy watersheds, and reservoir storage levels in the Sierra Nevada stayed high until operators began releasing water to make room for the 165% of normal snowpack that was measured in the April 1 snow survey. May and June had 184% and 445% of normal precipitation, respectively, maintaining the snowpack at record levels into the summer months. Snowmelt runoff was over 150% of normal.

*Water Year 2011-12.* Precipitation during this water year is well below normal in the Bay Area and Tuolumne watersheds. An extended dry period which began in mid-November lasted through late January when the first significant winter storm occurred. October through January precipitation is near 51% of average conditions. Mountain snowpack is near 30% of normal as measured by the February 1 snow surveys. The February 1 water supply outlook for the Tuolumne basin reflects the dry conditions and the April thru July snowmelt runoff is forecasted to be near 50% of median conditions. Even though conditions have been dry, system storage is relatively high due to the exceptionally wet conditions of water year 2010-11 and low demands over the past 6 months. It is expected that all SFPUC reservoirs in the Tuolumne basin will fill during snowmelt runoff with a limited amount of excess spill and that storage targets for the Bay Area reservoirs will be met.

# FUTURE WATER DEMAND AND SUPPLY

#### **Projected Demand and Adequacy of Water Supply**

**Retail Demand.** In its 2010 Urban Water Management Plan (the "2010 UWMP"),<sup>3</sup> the SFPUC projected water use for its Retail Customers using City-developed water end-use models. These models, which were first developed in 2004 and updated in 2010, incorporate economic and demographic forecast data, including projections of population, housing stock and employment, and anticipated market penetration of plumbing code changes.

These forecast data were based on the Association of Bay Area Governments ("ABAG") reports *Projections 2002, Projections 2009,* and *Draft Projections 2011* (developed as part of the Bay Area's Sustainable Communities Strategy). These reports summarize demographic projections for the City at 5-year intervals as well as California Department of Finance estimates and projections at 10-year intervals. These projections were reviewed and refined by the San Francisco Planning Department using up-to-date planning information for the City.

Results of the water demand forecasts show that the SFPUC's in-City retail water demand will only slightly increase, even though household population in the City is expected to increase by nearly 12% for the same period (from 2010 through 2035). The projected increase in in-City retail water demands is due primarily to estimated growth in business and industry activity, which will translate into a commensurate increase in water use. The expected increase in water use in the non-residential sector, however, is expected to be partially balanced by decreases in water use in the residential sector.

<sup>&</sup>lt;sup>3</sup> California law requires that Urban Water Management Plans be prepared and submitted every five years.

	2015	2020	2025	2030	2035
Residential Demand	_				
(Single and Multiple Family) <sup>(1)</sup>	46.8	45.5	44.7	44.3	44.4
Non Residential					
(Business/Industrial Demands) <sup>(1)(2)</sup>	25.8	26.7	27.7	28.9	30.1
Subtotal – Residential and Non-Residential	72.6	72.2	72.4	73.2	74.5
Unaccounted for System Losses <sup>(3)</sup>	5.0	4.9	5.0	5.0	5.1
Subtotal – Unaccounted for System Losses	5.0	4.9	5.0	5.0	5.1
Other Retail Demands <sup>(4)</sup>	3.8	3.8	3.8	3.8	3.8
Lawrence Livermore Lab & Groveland CSD	1.2	1.2	1.2	1.2	1.2
City Irrigation <sup>(5)</sup>	1.5	1.5	1.5	1.5	1.5
Castlewood & Sunol Golf Courses <sup>(6)</sup>	0.7	0.7	0.7	0.7	0.7
Subtotal – Other Demand	7.2	7.2	7.2	7.2	7.2
Total – Retail Demand	<i>84.8</i>	<i>84.3</i>	84.6	85.4	86.8

TABLE 3PROJECTED RETAIL WATER DEMAND (IN MGD)

1. Assumes the impact of water savings due to plumbing code changes, but does not take into account the role of active conservation (savings initiated from SFPUC-initiated conservation programs).

2. Includes Builders & Contractors, and Docks & Shipping.

Losses in 2015 – 2035 exclude meter under-registration because they are included in the retail demand projections for residential and nonresidential sectors. Meter under-registration losses estimated at 2.2% of residential and 2.1% of non-residential sector demands. System
losses excluding meter under-registration estimated at 6.86% of sector demand.

4. Includes the San Francisco County Jail, San Francisco International Airport, and other suburban or municipal accounts.

5. Includes irrigation at Golden Gate Park, the Great Highway median, and the San Francisco Zoo.

6. 100% of Castlewood demand (0.4 mgd) is met by groundwater wells in Pleasanton and 75% of Sunol Golf course demand (0.3 mgd) is met by subsurface diversions of surface water at the Sunol Filter Galleries. Projected demands are based on average use from 2000-10 and remain unchanged over the 25 year planning horizon.

Note: Amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: 2010 Urban Water Management Plan

*Wholesale Demand*. As part of the development of its Long-Term Reliable Water Supply Strategy, BAWSCA has updated demand projections for each of the Wholesale Customers, which BAWSCA included in its Draft Final report entitled "Updated Water Demand and Supply Need Projections for the Long-Term Reliable Water Supply Strategy," released January 26, 2012.

Water supplied by the SFPUC to the Wholesale Customers is metered. The total projected water demands of the Wholesale Customers are shown in Table 4.

In Fiscal Year 2010-11, Wholesale Customers collectively received approximately 66% of their water supply from the Regional Water System. Future projections indicate that between 2015 and 2035 this figure will be in the range of 56% to 65%. For the year 2035, water demands of the Wholesale Customers (regardless of water source) are projected to increase to approximately 315.2 mgd. Other water supplies available and developed by the Wholesale Customers, which include increased water conservation and recycling, show a net projected increase of about 32.9 mgd.

# TABLE 4 PROJECTED WHOLESALE CUSTOMER WATER DEMAND AND SUPPLIES (IN MGD)

	2015	2020	2025	2030	2035
Wholesale Customer		_			
Purchases from the Regional Water System	170.9	161.8-170.8	166.6-175.6	172.7-181.7	177.1-186.1
Other Supplies <sup>(1)</sup>	93.9	105.9 -114.9	113.4 -122.4	122.1 -131.1	129.1 -138.1
Total Wholesale Customer Demand	264.8	276.7	289.0	303.8	315.2

<sup>(1)</sup> Estimated as the difference between the Total Wholesale Customer Demand and the Wholesale Customer Purchases from the Regional Water System.

Note: Amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: BAWSCA's Draft Final Updated Water Demand and Supply Need Projections for the Long-Term Reliable Water Supply Strategy, released January 26, 2012.

**Projected Water Demands**. To assess future demand, the SFPUC completed several Retail Customer and Wholesale Customer demand and conservation studies between Spring 2002 and Fall 2004. Results of these studies provided the SFPUC and its Wholesale Customers with technical information to make future water management planning decisions and determine best estimates of future water purchases. The projection of future water demands is based on a customer-by-customer evaluation of baseline water use and an estimate of how these uses of water will change in the future as a result of plumbing code changes, demographics and industry change.

The following table shows total projected Regional Water System demand based on the information presented in Tables 3 and 4 above.

# TABLE 5 PROJECTED GROSS WATER DEMAND FISCAL YEARS ENDED JUNE 30 (IN MGD)

	2015	2020	2025	2030	2035
Retail Customers <sup>(1)</sup>	84.9	84.3	84.5	85.4	86.9
Wholesale Customers <sup>(2)</sup>	170.9	161.8-170.8	166.6-175.6	172.7-181.7	177.1-186.1
Total System	255.8	246.1-255.1	251.1-260.1	258.1-267.1	264.0-273.0

<sup>(1)</sup> Reflects updated projections from the 2010 UWMP.

<sup>(2)</sup> Based on BAWSCA's Draft Final Updated Water Demand and Supply Need Projections for the Long-Term Reliable Water Supply Strategy, released January 26, 2012.

Note: Amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC.

# Water Supply Initiatives

To ensure that the future water needs of its Retail and Wholesale Customers will be met in a more reliable and sustainable manner, the SFPUC has undertaken water supply projects in the WSIP to improve dry-year supplies, and is looking to diversify the City's water supply portfolio through the development of local water supplies such as recycled water, groundwater, and water conservation. Projects related to these efforts are described briefly below. The SFPUC is also continuing its efforts to advance the use of greywater and stormwater recapture in San Francisco.

*New Drought Supplies.* The WSIP water supply program includes development of dry-year supplies for the Regional Water System. The PEIR included an analysis of dry-year water supply transfers from the senior water right holders on the Tuolumne River, the Districts; a groundwater conjunctive use project; and a regional desalination project. The latter two projects are described below. The SFPUC is working on a dry-year water transfer of 2 mgd with the Modesto Irrigation District. The WSIP provides funding for the groundwater conjunctive program.

The SFPUC has received a letter from the Tuolumne River Trust organization asserting that the WSIP PEIR does not adequately analyze the full impact of the proposed 2 mgd water transfer. However, the Planning Department's Environmental Review Officer has considered the issue and determined that the WSIP PEIR is adequate for purposes of approving that proposed transaction. If the transfer is approved by both parties, the Tuolumne River Trust could seek judicial review of that determination in an effort to nullify that approval action.

**Groundwater Conjunctive Use.** The SFPUC, in conjunction with the City of Daly City, California Water Service Company (South San Francisco District) ("Cal Water"), and the City of San Bruno, is developing a groundwater conjunctive use project to provide additional water supplies in dry years. The Groundwater Storage and Recovery Project, located in northern San Mateo County, is designed to create a new dry-year groundwater supply that can be utilized at a rate of 8,100 acre-feet per year during the last 7.5 years of the SFPUC "design drought," which is a combination of the last two most severe historic droughts on record – 1987-91 and 1976-77 – with an additional 18 month dry sequence. During normal and wet years, the SFPUC will deliver supplemental surface water to Daly City, San Bruno, and Cal Water in place of groundwater pumping. Reducing such pumping in normal and wet years thereby increases the volume of groundwater in storage that can be pumped in dry years.

**Desalination**. The SFPUC and several other Bay Area water supply agencies are participating in a Bay Area Regional Desalination Study exploring desalination as a means of meeting regional water needs. The Bay Area Regional Desalination Project could consist of one or more desalination facilities, with an ultimate total capacity of up to 65 mgd. The SFPUC and the other partner agencies are focusing on optimizing technologies that minimize power requirements and environmental effects.

*Local Groundwater and Recycled Water Projects*. The water supply projects being funded as a part of the WSIP include groundwater and recycled water projects that will result in water supply for the Retail customers. The local groundwater project, "San Francisco Groundwater Supply Project," includes installation of new groundwater wells to serve San Francisco retail customers. The "Westside Recycled Water Project" will provide approximately 2 mgd of recycled water for major irrigation users on the west side of the City, including Golden Gate Park, Lincoln Park and the San Francisco Zoo.

Additionally, two recycled water projects are currently under construction. The Sharp Park Recycled Water Project (0.08 mgd) and the Harding Park Recycled Water Project (0.23 mgd) are estimated to be complete in Spring 2012 and Summer 2012, respectively. The SFPUC is also undertaking feasibility analyses on four additional recycled water projects: San Francisco Eastside Recycled Water Project, Daly City Expansion Recycled Water Project, South San Francisco Recycled Water Project, and Menlo Country Club Recycled Water Project.

*Local Water Conservation*. The SFPUC has also increased its water conservation programs in an effort to achieve up to 5 mgd of new water savings by 2018. New conservation programs include high-efficiency toilet replacement in low-income communities and water efficient irrigation installation in municipal parks.

#### **Potential Impact of Climatic Change**

The issue of climate change has become an important factor in water resources planning in the State, and is being considered during planning for the Regional Water System. There is evidence that increasing concentrations of greenhouse gases have caused and will continue to cause a rise in temperatures around the world, which will result in a wide range of changes in climate patterns. Moreover, there is evidence that a warming trend occurred during the latter part of the 20th century and will likely continue through the 21st century. These changes will have a direct effect on water resources in the State, and numerous studies on climate and water in the State have been conducted to determine the potential impacts. Based on these studies, global warming could result in the following types of water resources impacts in the State, including impacts on the Regional Water System and associated watersheds:

- Reductions in the average annual snowpack due to a rise in the snowline and a shallower snowpack in the low- and medium-elevation zones, such as in the Tuolumne River basin, and a shift in snowmelt runoff to earlier in the year,
- Changes in the timing, intensity, and variability of precipitation, and an increased amount of precipitation falling as rain instead of as snow,
- Long-term changes in watershed vegetation and increased incidence of wildfires that could affect water quality,
- Sea level rise and an increase in saltwater intrusion,
- Increased water temperatures with accompanying adverse effects on some fisheries,
- Increases in evaporation and concomitant increased irrigation need, and
- Changes in urban and agricultural water demand.

However, other than the general trends listed above, there is no clear scientific consensus on exactly how global warming will quantitatively affect State water supplies.

The SFPUC staff performed an initial evaluation of the effect on the Regional Water System of a 1.5degree Celsius (°C) temperature rise between 2000 and 2025. The temperature rise of  $1.5^{\circ}$ C is based on a consensus among many climatologists that this level of warming is likely to occur by 2025. The evaluation predicts that an increase in temperature of  $1.5^{\circ}$ C will raise the snowline approximately 500 feet. The elevation of the watershed draining into Hetch Hetchy Reservoir ranges from 3,800 to 12,000 feet above mean sea level, with about 87% of the watershed area above 6,000 feet. In 2000 (a normal hydrologic year in the 82-year period of historical record), the average snowline in this watershed was approximately 6,000 feet during the winter months. Therefore, the SFPUC evaluation indicates that a rise in temperature of  $1.5^{\circ}$ C between 2000 and 2025 will result in less or no snowpack between 6,000 and 6,500 feet and faster melting of the snowpack above 6,500 feet. Similarly, a temperature rise of  $1.5^{\circ}$ C between 2025 and 2050 will result in less or no snowpack between 6,500 and 7,000 feet and faster melting of the snowpack above 7,000 feet.

The SFPUC climate change modeling indicates that, on average, about 7% of the runoff currently draining into Hetch Hetchy Reservoir will shift from the spring and summer seasons to the fall and winter seasons in the Hetch Hetchy basin by 2025. This percentage is within the current interannual variation in runoff and is within the range accounted for during normal runoff forecasting and existing reservoir management practices. The additional change between 2025 and 2030 is not expected to be detectible. The predicted shift in runoff timing is similar to the results found by other researchers modeling water resource impacts in the Sierra Nevada due to warming trends associated with climate change.

Based on these preliminary studies and the results of literature reviews, the potential impacts of global warming on the Regional Water System are not expected to affect the water system operations through 2030. SFPUC hydrologists are involved in ongoing monitoring and research regarding climate change trends and will continue to monitor the changes and predictions, particularly as these changes relate to water system operations and management of the Regional Water System. The SFPUC has developed a workplan to further advance its research on the effects of climate change on the Regional Water System.

#### **Proposals to Restore Hetch Hetchy Valley**

Some environmental organizations advocate for the removal of the Hetch Hetchy reservoir and the restoration of Hetch Hetchy Valley.

In March 2012, The Yosemite Restoration Campaign, sponsored by an organization called "Restore Hetch Hetchy", began the process of qualifying an initiative ordinance that is entitled the "Water Sustainability and Environmental Restoration Planning Act of 2012". If the proponents secure the requisite qualifying signatures from the electorate, the ballot initiative petition could qualify for the November 2012 San Francisco ballot. The proposed initiative ordinance provides that the City shall develop a two phase plan that: in phase one, would identify alternative water sources, supply options and alternative renewable energy sources; and, in phase two, would evaluate how to improve Tuolumne River flows, decrease stormwater discharge, and end using Hetch Hetchy Valley as a reservoir so it could be restored as part of Yosemite National Park. The proposed initiative calls for creation of a five-member task force composed of the General Managers of the Commission and BAWSCA, along with three people with relevant expertise to be appointed by the City's Board of Supervisors. The task force would guide the planning effort and be required to submit a plan by November 1, 2015, and the Board of Supervisors would then hold a public hearing to determine whether a City Charter amendment that required implementation of the plan should be placed on the November 2016 ballot for voter consideration. The proposed ballot measure provides that the plan include timelines to implement the first phase by 2025 and the second phase by 2035. The proposed initiative measure would appropriate up to \$8 million from legally available funds for the two-phase planning process.

Certain business groups, the Mayor, and many elected officials that represent the San Francisco Bay region have announced opposition to the proposed ballot measure. If the ballot measure qualifies for the ballot and is adopted, there is a possibility that a lawsuit could be filed challenging the legality of one or more provisions of the initiative ordinance.

There have been previous studies that examined prior proposals to remove the Hetch Hetchy Reservoir. For example, the California Department of Water Resources and the California Department of Parks and Recreation issued a comprehensive report and concluded that it does appear technically feasible to restore Hetch Hetchy valley, but expressed caution about the financial feasibility. The study estimated that the total cost for such a project would range from nearly \$3 billion to \$10 billion. The planning effort alone, they concluded, would take up to ten years to complete and would cost an additional \$65 million dollars.

The SFPUC is unable to predict whether this initiative, or any future initiatives, might be submitted to or approved by the voters, or their potential impact on the SFPUC or the Water Enterprise.

#### WATER FACILITIES

#### General

The Regional Water System evolved through the development of two separate water systems: the Spring Valley Water Company and the Hetch Hetchy Project.

• The Spring Valley Water Company was established in 1858, developing a spring and several creeks into a local water system. It expanded over the years with the construction of Pilarcitos Reservoir, followed by San Andreas Reservoir, Upper Crystal Springs Reservoir and Lower Crystal Springs Reservoir, all on the Peninsula in San Mateo County. Later the company extended its system to additional sources on Alameda Creek in Alameda County and expanded its service area to include additional Peninsula and South Bay customers. The City acquired the local supplies and retail distribution system of the Spring Valley Water Company in 1930.

• Following adoption of the Raker Act, the City was able to proceed with plans to develop its own water supply system. The construction of the Hetch Hetchy Project began in earnest in 1914, and after almost twenty years of construction, including building of the Hetch Hetchy Reservoir and required transmission system, Sierra Nevada water began flowing into the local distribution system in 1934.

Since the 1930s, the major additions to the SFPUC's water system have included the raising of O'Shaughnessy Dam at Hetch Hetchy Reservoir and the development of Lake Lloyd, the construction of additional pipelines across the San Joaquin Valley, and the local construction of San Antonio Reservoir in Alameda County and the Bay Division Pipelines 2, 3 and 4. Other local projects included Crystal Springs Pipeline No. 3, Sunol Valley and San Andreas Filtration Plants, and the Crystal Springs Bypass Tunnel and Balancing Reservoir.

The Regional Water System is geographically delineated between the Hetch Hetchy Project and the Bay Area water system facilities.

• The Hetch Hetchy Project is generally comprised of the reservoirs, hydroelectric generation and transmission facilities, and water transmission facilities from Hetch Hetchy Valley west to the Alameda East Portal of the Coast Range Tunnel in Sunol Valley.

• The local Bay Area water system is generally comprised of the facilities west of Alameda East Portal and includes the Alameda and Peninsula watershed reservoirs, two water treatment plants and the distribution system that delivers water to the SFPUC's Retail Customers and Wholesale Customers.

#### Water Distribution

**Regional Water System.** The Regional Water System comprises three regional water supply and conveyance systems: the Hetch Hetchy System; the Alameda System; and the Peninsula System (as herein defined).

*Hetch Hetchy System*. In the Hetch Hetchy System, water is diverted from Hetch Hetchy Reservoir into a series of tunnels and aqueducts from the Sierra Nevada to the San Joaquin Pipelines that cross the San Joaquin Valley to the Coast Range Tunnel (collectively, the "Hetch Hetchy System") which connects to the Alameda system at the Alameda East Portal.

**The Alameda System**. The "Alameda System" includes two reservoirs, San Antonio Reservoir and Calaveras Reservoir, which collect water from the upper Alameda and San Antonio Creek watersheds in Alameda County plus conveyance facilities connecting the Hetch Hetchy System and Alameda water sources to the Peninsula System. These conveyance facilities include pipelines known as the Alameda Siphons that connect the Coast Range Tunnel to the Irvington Tunnel.

The Irvington Tunnel supplies the four Bay Division Pipelines that cross the South Bay Area to the Peninsula System. Bay Division Pipelines 1 and 2 cross the Bay near the Dumbarton Bridge. Bay

Division Pipelines 3 and 4 traverse the southerly edge of the Bay delivering water to SFPUC customers along the way. All four pipelines reconnect near the inlet to the Pulgas Tunnel on the Peninsula.

The Sunol Valley Water Treatment Plant filters and disinfects water supplied from San Antonio and Calaveras Reservoirs.

A turnout from the South Bay Aqueduct of the California State Water Project can supply limited supplemental water to San Antonio Reservoir. However, the SFPUC currently possesses no entitlements to water from the State Water Project.

**Peninsula System**. The "Peninsula System" includes conveyance facilities connecting the Bay Division Pipelines to the In-City Distribution System and to other SFPUC customers on the Peninsula. Two reservoirs, Crystal Springs and San Andreas, collect runoff from the San Mateo Creek watershed. Water from Pilarcitos Reservoir, on Pilarcitos Creek, serves one of the Wholesale Customers, the Coastside County Water District (which includes the City of Half Moon Bay), directly and can also deliver water to Crystal Springs and San Andreas Reservoirs. Water delivered from the Bay Division Pipelines in excess of Peninsula System and in-City demands spills into Crystal Springs and San Andreas Reservoirs. The Harry Tracy Water Treatment Plant filters and disinfects water supplied from Crystal Springs and San Andreas Reservoirs before it is delivered to Peninsula customers and the In-City Distribution System.

*In-City Distribution System*. The City's retail water supply is delivered to the City in several major pipelines. Two pipelines provide water to the eastside of the In-City Distribution System and three pipelines serve the west side of the In-City Distribution System.

The "In-City Distribution System" delivers water to homes and businesses in the City. Several major pipelines convey water from the Peninsula System to the City. Water to the east side of the In-City Distribution System is fed by two pipelines that terminate at University Mound. Water to the west side of the In-City Distribution System is fed by two pipelines that terminate at Sunset Reservoir and one that terminates at Merced Manor Reservoir.

*Summary of System Facilities*. The facilities making up the Regional Water System and the In-City Distribution System are summarized below.

### TABLE 6SUMMARY OF SYSTEM FACILITIES

System
-
er tanks

Source: SFPUC, Water Enterprise

#### Water Treatment

*Hetch Hetchy Water.* The Hetch Hetchy Reservoir is the largest unfiltered water supply on the West Coast and one of only a few large unfiltered municipal water supplies in the nation. The water originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored.

This pristine water source is located in the well-protected Yosemite National Park and the High Sierra region and meets or exceeds all federal and State criteria for watershed protection. The water originating from the Hetch Hetchy reservoir is protected in pipes and tunnels as it is conveyed to the Bay Area, and requires pH adjustment to control pipeline corrosion and disinfection for bacteria control. Based on the SFPUC's disinfection

treatment practice, extensive bacteriological-quality monitoring, and high-operational standards, the U.S. Environmental Protection Agency and the State of California Department of Health Services have determined that the Hetch Hetchy water source meets federal and State drinking water quality requirements without filtration, and thus the SFPUC is not required to filter water from the Hetch Hetchy Reservoir. For further discussion of the State and federal regulatory requirements affecting the Water Enterprise, see "REGULATORY MATTERS."

The Tesla Treatment Facility, that enhances high water quality through ultraviolet ("UV") treatment, is a key component of the WSIP. The Tesla Treatment Facility was officially dedicated in July 2011, following two years of construction. The facility uses UV light to disinfect Hetch Hetchy water to meet new federal requirements to control the waterborne parasite Cryptosporidium, and is among the largest drinking-water UV disinfection facilities in North America. In the same location, a new disinfection station, with a control room, offices and a water-quality laboratory, has replaced the old station, which was built in 1937 and no longer met current fire or earthquake safety standards. See "WATER SYSTEM IMPROVEMENT PROGRAM" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

*Local Water.* All water derived from sources other than the Hetch Hetchy Reservoir is currently treated at one of two treatment plants: the Sunol Valley Water Treatment Plant and the Harry Tracy Water Treatment Plant. Major upgrades of these two facilities are in progress. See "WATER SYSTEM IMPROVEMENT PROGRAM" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

*Sunol Valley Water Treatment Plant.* The Sunol Valley Water Treatment Plant treats all water from the two local reservoirs, Calaveras and San Antonio. The plant has a peak capacity of 160 mgd and a sustainable capacity of 120 mgd. Treatment processes at the Sunol Valley Water Treatment Plant include coagulation, flocculation, sedimentation, filtration, and disinfection. Fluoridation, chloramination and corrosion control treatment are provided for the combined Hetch Hetchy Project and Sunol Valley Water Treatment Plant water at the Sunol chloramination and fluoridation facilities. The plant also filters Hetch Hetchy water on the occasions when the Sierra supply does not meet required drinking water standards. Should the Bay Area be cut off from Hetch Hetchy supplies because of an emergency, the treatment plant must sustainably treat 160 million gallons of water a day to meet minimum customer demands.

The Sunol Valley Water Treatment Plant Expansion and Treated Water Reservoir Project will add a new water treatment train at the plant, retrofit existing filters, create a 17.5 million gallon circular balancing reservoir for treated water as it leaves the plant. The project will also include other new connections and facilities that will enable the plant to treat enough water to meet basic customer demands alone for up to 60 days after a major earthquake. These improvements will help increase delivery reliability and water quality.

*Harry Tracy Water Treatment Plant.* The Harry Tracy Water Treatment Plant primarily treats water from the Peninsula System reservoirs and has a peak capacity of 140 mgd and a sustainable capacity of 120 mgd. Treatment processes at the Harry Tracy Water Treatment Plant include ozonation, coagulation, flocculation, filtration, disinfection, fluoridation, corrosion control treatment and chloramination.

Updates currently underway to the plant will improve delivery reliability and provide seismic upgrades to achieve a sustained capacity of 140 mgd for at least 60 days, and to provide 140 mgd within 24 hours following a seismic event on the San Andreas Fault, through the addition of filters, upgrades to various systems, and seismic retrofits of critical process units.

#### Water Storage

**Up-Country Storage.** The majority of the water delivered by the SFPUC is supplied by runoff from the upper Tuolumne River watershed on the western slope of the central Sierra Nevada. Three major reservoirs collect runoff: Hetch Hetchy Reservoir, Lake Lloyd, and Lake Eleanor. Storage space in New Don Pedro Reservoir is integrated into system operations. New Don Pedro Reservoir is owned by the Districts and is located on the Tuolumne River downstream of the Hetch Hetchy System.

Water stored in the Hetch Hetchy Reservoir is also used for hydroelectric generation and released downstream to satisfy instream flow requirements. Normally only Hetch Hetchy Reservoir supplies water exported to the Bay Area for municipal and industrial uses. Releases from Lake Eleanor and Lake Lloyd are used to satisfy instream flow requirements, satisfy Raker Act entitlements to downstream irrigation districts and produce hydroelectric power. Water stored in New Don Pedro Reservoir is credited to the City's water bank account, which allows the City to meet its Raker Act water obligations to the Districts and divert water supply from Hetch Hetchy Reservoir to the Bay Area.

*Local Storage.* On the San Francisco Peninsula, the SFPUC utilizes Crystal Springs Reservoir, San Andreas Reservoir and Pilarcitos Reservoirs located in San Mateo County to capture local watershed runoff. In the Alameda Creek watershed (Alameda County), the SFPUC has constructed the Calaveras Reservoir and San Antonio Reservoir. In addition to using these facilities to capture runoff, San Andreas, San Antonio and Crystal Springs reservoirs also provide storage for Hetch Hetchy Project diversions, and, along with Calaveras, serve as an emergency water supply in the event of an interruption to Hetch Hetchy Project deliveries.

*Dam Supervision.* Eighteen dams under the jurisdiction of the SFPUC are presently supervised by the California Department of Water Resources' Division of Dam Safety ("DSOD"). The SFPUC's Crystal Springs Reservoir System and Calaveras Dam are currently operating under DSOD-imposed restrictions. See "REGULATORY MATTERS—Dam Licensing and Safety Issues."

The following table summarizes the regional reservoirs within the Water Enterprise.

Reservoir	Maximum Storage Capacity (Acre-feet)
Tuolumne System (Up-Country)	
Hetch Hetchy <sup>(1)</sup>	360,340
Cherry <sup>(2)</sup>	273,340
Lake Eleanor <sup>(3)</sup>	21,495
Water Bank	570,000
Subtotal Tuolumne	1,225,175
Local Bay Area	
Calaveras (East Bay) <sup>(4)</sup>	96,824
San Antonio (East Bay)	50,496
Crystal Springs (Peninsula)	58,377
San Andreas (Peninsula)	18,996
Pilarcitos (Peninsula)	2,995
Subtotal Local	227,688
Total Regional Water System	1,452,863

### TABLE 7 REGIONAL WATER SYSTEM STORAGE CAPACITY

<sup>(1)</sup> Storage capacity shown includes capacity when drum gates (i.e., floodgates for shutting out or releasing the flow of water over spillways) are activated.

(2) Storage capacity shown includes flashboards, which are boards or structures of boards extending above a dam to increase its capacity.

<sup>(3)</sup> Storage capacity shown with flashboards out.

<sup>(4)</sup> Since December 2001, in response to safety concerns about the seismic stability of the dam and mandates from the DSOD, the SFPUC has held the maximum water level at approximately 37,800 acre-feet (roughly 40% of the maximum capacity shown), pending construction of a new comparably sized replacement dam downstream.

Source: SFPUC, Water Enterprise

*In-City Storage.* The Water Enterprise's in-City reservoirs and tanks have the capacity to hold approximately 412 million gallons, or 1,265 acre-feet. The Water Enterprise estimates this capacity to be an approximate five-day supply at the current average rate of consumption for the City. In-City reservoirs that are also terminal reservoirs for the Regional Water System moderate flow peaking for the Regional Water System and water stored in them can be conveyed back to the San Francisco Peninsula.

The following table summarizes the in-City reservoirs and storage tanks maintained by the Water Enterprise.

Reservoir	Millions of Gallons
Sunset <sup>(1)</sup>	176.7
University Mound <sup>(1)</sup>	140.9
Sutro	31.4
Summit	14.0
College Hill	13.5
Stanford Heights	12.9
Merced Manor <sup>(1)</sup>	9.5
Lombard	2.7
Potrero	1.0
Storage Tanks	9.3
Total	411.9

TABLE 8
IN-CITY DISTRIBUTION SYSTEM POTABLE WATER STORAGE CAPACITY

<sup>(1)</sup> Represent terminal reservoirs for the Regional Water System. Source: SFPUC, Water Enterprise

In addition, there is an emergency supply of existing non-potable water immediately available within the City at Lake Merced. The Lake Merced reservoir currently holds approximately 1.5 billion gallons.

#### Seismic Hazards

The Water Enterprise's distribution and transmission systems and the facilities of the Hetch Hetchy Project are located in seismically active regions of the State. The San Andreas Fault lies immediately west of the City, and the Hayward fault is approximately 15 miles to the east. A third major fault, the Calaveras Fault, is a branch of the Hayward Fault and lies east of the Hayward Fault.

During the past 150 years, the San Francisco Bay Area has experienced several major and numerous minor earthquakes. The largest was the 1906 San Francisco earthquake along the San Andreas Fault with an estimated magnitude of 8.2 on the Richter scale. Another was the 1868 Hayward earthquake along the Hayward Fault. The most recent significant earthquake was the October 1989 Loma Prieta earthquake on the San Andreas Fault, which had a magnitude of 7.1 on the Richter scale and an epicenter near Santa Cruz, approximately 55 miles south of San Francisco. According to United States Geological Survey findings, a significant earthquake along these or other faults is probable during the period the Bonds will be outstanding.

The Regional Water System crosses several active and potentially active faults, including major strike-slip faults within the San Francisco Bay region. Major fault crossings along the pipeline delivery system include the Orestimba fault at Tesla Portal, the Greenville fault in the Coast Range Tunnel, the Calaveras fault at the Alameda Siphons, and the southern Hayward fault at the Bay Division Pipelines numbers 1, 2, 3 and 4. In addition, other lower slip rate but potentially active faults cross the water system. These faults potentially move by secondary or triggered slip during large earthquakes on the San Andreas fault.

The Greenville, Calaveras, Hayward and San Andreas faults have a high likelihood of producing a major (magnitude  $\geq 6.7$ ) earthquake in the San Francisco Bay region in the next 30 years. A large earthquake on these

faults has the potential for generating surface-fault rupture that is hazardous to specific SFPUC facilities. A major goal of the WSIP is to rehabilitate and strengthen the tunnels, pipelines and other Water Enterprise facilities that cross or are situated near known active faults.

If a major seismic event or other emergency occurs, the SFPUC is authorized under the Water Supply Agreement to adopt emergency rate surcharges outside of the normal budget development process. Such rate surcharges will be applicable to both Retail Customers and Wholesale Customers and incorporate the same percentage increase for all customers. See "FINANCIAL OPERATIONS—Wholesale Water Sales Revenue." Any emergency rate surcharge adopted by the SFPUC will remain in effect only until the next budget-coordinated rate-setting cycle, at which time it can be reviewed for continuance. A prolonged reduction in the Water Enterprise's water supply resulting from a major earthquake could have a material adverse effect on Revenues.

If a significant earthquake occurs that affects the Water Enterprise's tunnels, pipelines or other facilities, the Water Enterprise would attempt to repair any damage as quickly as possible, but the amount of time required to return the facilities to service would depend on the nature and extent of damage incurred. See also "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM—Levels of Service Goals—Seismic Reliability."

A major seismic event affecting critical locations prior to completion of WSIP improvements could result in service interruptions of 60 days or longer. The Water Enterprise has established intertie connections with the East Bay Municipal Utility District and the Santa Clara Valley Water District to diversify water supply options in case of a seismic event. Should the Irvington Tunnel or the four major pipelines branching from the Irvington Tunnel become inoperable, the Water Enterprise would attempt to negotiate additional water sharing agreements with these and other regional water utilities which interconnect with Water Enterprise facilities, but there is no assurance that such negotiations would be successful.

If damage to the Irvington Tunnel or the pipelines that connect to the tunnel resulted in the loss of water transported through the tunnel, the remaining water supply would be limited to storage in three reservoirs in San Mateo County (the Crystal Springs, San Andreas and Pilarcitos Reservoirs) and three terminal reservoirs located in San Francisco as well as existing intertie connections. The combined capacity of the three San Mateo County reservoirs is approximately 29.8 billion gallons. The SFPUC typically keeps these reservoirs filled to a combined capacity of 18 billion gallons, or an estimated two and one-half month water supply based on historical average daily water demand of both the Retail Customers and Wholesale Customers. It is anticipated that in-City storage alone would last approximately four to seven days.

Separate from the SFPUC system, the Wholesale Customers have storage ranging from zero to seven days.

*System Level of Service Criteria after Seismic Events*. The SFPUC has established basic "Level of Service" criteria for the design of new facilities and upgrade of existing facilities, including projects within the WSIP: to deliver winter day demand ("WDD") of 215 mgd (projected February 2030 demand) within 24 hours after a major earthquake. This embodies the following primary criteria and assumptions to be used in examining system reliability with system retrofit projects in place:

- Deliver WDD to at least 70% of the Wholesale Customers' turnouts within each of the three customer groups (Santa Clara/Alameda/South San Mateo County, Northern San Mateo County, and City of San Francisco).
- Achieve a 90% confidence level of meeting the above goal, given the occurrence of a major earthquake. The earthquakes considered are treated independently and with equal weighting, without regard to their return period.
- To achieve the basic level of service, the SFPUC will rely on the Wholesale Customers' own water systems and supply or other regional water purveyors systems. The SFPUC will work with the Wholesale Customers to assess their ability to contribute to their own system reliability.

- The SFPUC will consider a facility to have failed if it cannot be brought back to its intended purpose within twenty-four hours without secondary damage resulting.
- To achieve the basic level of service, the SFPUC will assume that power supplies are available, whether from the grid or from standby sources.

No item in the Regional Water System is required to be seismically upgraded or retrofitted as long as the system-wide performance goals established by the SFPUC are expected to be satisfied. Earthquake induced damage to selected components and systems is acceptable, as long as the system-wide performance remains acceptable. See "APPENDIX D-WATER SYSTEM IMPROVEMENT PROGRAM—Levels of Service Goals—Seismic Reliability."

#### Safety and Security

The safety of the facilities of the Water Enterprise is maintained via a combination of regular inspections by SFPUC employees, electronic monitoring, and analysis of unusual incident reports. All above-ground facilities operated and maintained by the SFPUC are controlled-access facilities with fencing, gates, closed circuit television systems and security officers at certain points. Smaller, above-ground and subterranean pumping stations operated and maintained by the SFPUC are locked with padlock or internal locking mechanisms, and most are monitored via access/intrusion alarms. Security improvements are evaluated on an ongoing basis. The electronic operations and controls have been evaluated and exposure reduced through a series of technology systems enhancements and integration.

#### WATER SYSTEM IMPROVEMENT PROGRAM

#### **Program Summary**

The WSIP is a multi-billion dollar multi-year program to upgrade the SFPUC regional and local water systems. The program will deliver capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high-quality drinking water to its Wholesale Customers and Retail Customers in an environmentally sustainable manner. The proposed WSIP is based on two fundamental principles – a clean, unfiltered water source and a gravity-driven system – and is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply goals.

For detailed information regarding the WSIP, see "APPENDIX D-WATER SYSTEM IMPROVEMENT PROGRAM."

#### **Program Scope**

The WSIP presently includes a total of 86 projects, which vary in size from a few million dollars to over \$400 million. The projects are divided into two sub-programs – Local and Regional.

*Local Program.* The Local Program includes 40 projects (including 5 Water Supply Projects) located within City limits that only benefit City residents, and include improvements to existing in-City distribution pipelines, storage reservoirs and tanks, pump stations, and miscellaneous facilities. (As of July 1, 2011, management and implementation of the Water Supply Projects were transferred from the WSIP Local Program to the Water Enterprise Capital Improvement Program.)

**Regional Program.** The Regional Program includes the remaining 46 projects that benefit both San Francisco residents and the Wholesale Customers, and include a wide variety of improvements such as upgrades to and the addition of new treatment, transmission (pipelines, tunnels, pump stations), and storage (dams and reservoirs) facilities spread over seven counties.

The WSIP is further divided into the following categories of projects:

*San Francisco Local Projects.* The WSIP includes 40 local projects that will enhance the reliability of the In-City Distribution System by replacing aging and seismically vulnerable infrastructures, and will diversify the SFPUC's water supply portfolio. Local projects include improvements to existing and construction of new reservoirs, tanks, pump stations, pipelines and water supply infrastructure.

San Joaquin Regional Projects. These projects are designed to improve water delivery reliability by augmenting three existing transmission pipelines that transmit the Hetch Hetchy water supply across the San Joaquin Valley, and enhance water quality by building the Tesla Disinfection Facility, a new advanced disinfection/treatment facility for the SFPUC's largest source of supply.

Sunol Valley Regional Projects. The projects within this region are designed to address delivery and seismic vulnerabilities associated with the delivery of Hetch Hetchy water through the Sunol Valley and water originating from the Alameda Watershed. Projects include the construction of a new Calaveras Dam, a fourth Alameda Siphon, a new Irvington Tunnel and other connecting large-diameter pipelines, as well as upgrades to the existing Sunol Valley Water Treatment Plant and San Antonio Pump Station. All of these facilities are within or in close proximity to the Calaveras Fault influence zone.

*Bay Division Regional Projects*. The projects within this region address the seismic vulnerability of the four Bay Division Pipelines, which transmit the blend of Hetch Hetchy and Sunol Valley water across the San Francisco Bay to the Peninsula and serve a large number of Wholesale Customers. The projects in this region address the crossing of the Hayward Fault and system vulnerability associated with the close proximity of the San Andreas Fault; and add system redundancy and operational flexibility.

*Peninsula Regional Projects*. The projects within this region are generally designed to address facility seismic vulnerabilities, and meet water quality and delivery goals for the Crystal Springs, San Andreas and Pilarcitos Reservoirs. Projects include the construction of a new Crystal Springs Bypass Tunnel and large-diameter pipelines, as well as upgrades to the existing Harry Tracy Water Treatment Plant, the Pulgas Balancing Reservoir, and the Lower Crystal Springs Dam. All these facilities are located within the San Andreas Fault influence zone.

San Francisco Regional Projects. The projects within this region include the seismic retrofit of the Sunset and University Mound Terminal Reservoirs, and a groundwater storage and recovery project. The two reservoir projects are located within the City but can be used to supply water back to the Northern Peninsula, which can benefit the Wholesale Customers. The groundwater project includes improvements in both San Mateo and San Francisco counties.

Support Projects (formally System Wide Region). In July 2011, the System Wide Region was re-named as Support Projects. These projects include (1) system security upgrades, which involves the development and integration of security components at critical water system facilities, (2) the PEIR, which was prepared in compliance with CEQA to identify and analyze potential programmatic environmental impacts of the proposed system improvements, (3) the Watershed Environmental Improvement Program, which consists of conservation easements and/or fee title purchase of property from willing landowners to permanently protect Alameda Creek Watershed lands, (4) the Bioregional Habitat Restoration project (formerly Habitat Reserve Program), which is intended to provide a coordinated and consolidated approach to compensate for habitat impacts that would result from the implementation of the WSIP projects in the San Joaquin, Sunol Valley, Bay Division and Peninsula Regions of the Regional Water System, and (5) Regional Program management.

#### 2011 WSIP Program Schedule and Budget

**Program Schedule**. When the program was originally developed in 2003, the overall completion date was projected to be March 2016. The Commission later adopted revisions to the WSIP schedule in 2005, 2007, 2009 and 2011, with WSIP completion dates of June 2014, December 2014, December 2015, and July 2016, respectively. The schedule modifications over the years were needed to reflect the various changes in project/program scopes and the various challenges encountered in the field; address difficult environmental and regulatory issues, and system operational constraints; and take into account the actual completion of key work elements and projects. Currently, the anticipated WSIP completion date remains at July 2016, which corresponds to the WSIP schedule adopted by the Commission in July 2011.

**2011 WSIP Program Budget**. The following table summarizes the WSIP budget approved by the Commission in July 2011. Key changes include: transfer of five Water Supply projects to Water Enterprise CIP; and establishment of a reserve with savings accrued to date. The Program Reserve was originally set at \$161 million when the 2011 WSIP Program Budget was approved and the remaining balance, as of the end of March 2012, is just over \$144 million.

#### TABLE 9 2011 WSIP BUDGET AND PROJECTED COSTS (IN MILLIONS)

Project Category	2011
	Approved Budget <sup>(1)</sup>
San Joaquin Regional Projects	\$337
Sunol Valley Regional Projects	1,063
Bay Division Regional Projects	706
Peninsula Regional Projects	774
San Francisco Regional Projects	194
San Francisco Local Projects (Including Water Supply)	642
Support Projects	254
Program Reserve <sup>(1)</sup>	144
Net Financing <sup>(2)</sup>	472
Program Total <sup>†</sup>	\$4,586

Totals may not add due to independent rounding.

(1) Program Reserve projected cost savings now \$135 million.

(2) Does not include \$107 million of realized bond premium to date.

Source: SFPUC, Financial Planning

**Program Expenditures and Encumbrances.** A summary of the WSIP expenditures and encumbrances is shown in the following table.

#### TABLE 10 WSIP BUDGET AND SPENDING SUMMARY AS OF MARCH 5, 2012 (IN MILLIONS)

	2011	Unencumbered	
	Total	Expended/	Remaining
	Approved	Encumbered	Balance
Regional Projects	\$3,327	\$2,715	\$613
Local Projects <sup>(1)</sup>	642	349	293
Financing Costs (2)	472	407	64
Program Reserve <sup>(3)</sup>	144	0	0
Total	\$4,586	\$3,471	\$1,115

(1) Local projects include Water Supply Projects.

(2) Does not include \$107 million of realized bond premium to date.

(3) Program Reserve projected cost savings now \$135 million.

Note: Certain amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC, Financial Services

#### **Program Status**

The table below shows the number of WSIP projects active in each major implementation phase. See "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM" for additional details regarding the current status and performance of the WSIP.

### TABLE 11STATUS OF WSIP PROJECTS THROUGH MARCH 31, 2012

			Value of	Projects
	Number o	Number of Projects		llions)
	Local	Regional	Local	Regional
Active Phase	Program	Program	Program	Program
Planning	2	1	\$56	\$43
Design	2	3	217	193
Bid & Award	1	2	64	189
Construction	4	16	70	2,486
Close-Out	5	10	65	271
Completed	26	14	168	171
Total <sup>†</sup> :	40	46	\$640	\$3,351

Totals may not add due to independent rounding.

Source: SFPUC, 2<sup>nd</sup> quarter Fiscal Year 2011-12 WSIP Quarterly Report

#### **Potential Delays and Cost Increases**

With only 8 of the 86 WSIP projects remaining in planning and design, the pre-construction risks that were reported in previous disclosure documents have been reduced significantly or no longer exist. Most of the factors that may impact the currently anticipated schedule and cost of the WSIP relate to construction activities. They include, among others, the following. See also "RISK FACTORS—Cost of the WSIP; Timely Completion of the WSIP" and "APPENDIX D–WATER SYSTEM IMPROVEMENT PROGRAM."

• scheduling of system shutdowns needed to connect new or upgraded facilities to the existing water system without impacting water deliveries to customers; many of these shutdown windows are inflexible because they need to take place during low water usage periods, and delays can adversely affect the WSIP overall schedule; • the discovery of unforeseen underground/geotechnical conditions, particularly for projects with remaining tunneling activities (New Irvington Tunnel and Bay Tunnel) and extensive earthwork (Calaveras Dam Replacement);

• the discovery of unforeseen site conditions associated with existing infrastructure; many of the WSIP projects involve upgrade to existing structures and facilities that were built a very long time ago and accurate asbuilt records are not always available;

• the discovery of unforeseen site conditions associated with utility conflicts; many of the WSIP projects involve building new improvements in the vicinity of utilities owned by others and accurate records of the exact location and alignment of these utility lines and structures are not always available;

• unexpected environmental discoveries that may impact construction activities; those may include the discovery of protected species, archeological artifacts, contaminated soil or hazardous material at project sites;

• contractor claims, contractor nonperformance, failure of contractors to execute within contract price, or failure of contractors to meet schedule terms;

• errors or omissions in contract documents (drawings and specifications) that may result in change orders;

- equipment and material vendors' lack of compliance with quality and schedule requirements;
- inclement weather affecting contractor performance and timeliness of completion;
- · labor issues involving work stoppages or slowdowns; or
- the occurrence of a major seismic event.

#### FINANCING OF THE WATER SYSTEM IMPROVEMENT PROGRAM

*Commercial Paper Programs.* The WSIP Financing Plan utilizes the Water Enterprise's commercial paper program to fund projects through design and into the early construction phase. This approach allows the SFPUC to take advantage of lower interest rates on short-term paper, as well as sizing and timing of financing to projected need. Commercial paper is then refunded and consolidated into larger fixed-rate bond issues when reaching the authorized limits on outstanding commercial paper is projected. The SFPUC Water Commercial Paper Notes are authorized to be issued in an aggregate amount of up to \$500 million, consisting of \$250 million in authorized Proposition A Commercial Paper Notes and \$250 million in authorized Proposition E Commercial Paper Notes. See "OBLIGATIONS PAYABLE FROM REVENUES."

Uncertainties, disruptions or volatility in the financial markets, including but not limited to, credit or liquidity provider credit rating downgrades, availability of credit and/or liquidity facilities at an appropriate price, substantial fund flows into or out of the market for commercial paper, and other factors might affect market rates for the SFPUC's commercial paper program, which could affect the financing of the WSIP.

*Water Revenues and Water Revenue Bonds.* Initially, \$9.8 million of revenues and \$9.9 million of bond proceeds were used to finance projects early in the WSIP. Subsequently, the SFPUC has issued multiple series of water revenue bonds, as set forth above under "OBLIGATIONS PAYABLE FROM REVENUES" and further described below, to finance and refinance WSIP projects:

• The first long-term bond issue for the WSIP was the 2006 Series A Bonds, issued in the aggregate principal amount of \$507,815,000. The proceeds of the 2006 Series A Bonds were used to refund \$120.6 million in Proposition A Commercial Paper Notes outstanding at the time and to provide additional funds for the WSIP.

• The SFPUC issued the 2009 Series A Bonds on August 19, 2009, in the aggregate principal amount of \$412,000,000. The proceeds of the 2009 Series A Bonds were used to refund \$229.6 million of the Proposition A Commercial Paper Notes and to provide \$139,217,713 in additional funds for the WSIP.

• The SFPUC issued the 2009 Series B Bonds on September 15, 2009, in the aggregate principal amount of \$412,000,000. The proceeds of the 2009 Series B Bonds were used to provide \$377,777,834 in additional funds for the WSIP.

• The SFPUC issued the 2010 Series ABC Bonds on June 17, 2010, in the aggregate principal amount of \$488,705,000. The proceeds of the 2010 Series ABC Bonds were used to provide \$364,757,301 in additional funds for the WSIP.

• The SFPUC issued the 2010 Series DE Bonds on August 4, 2010, in the aggregate principal amount of \$446,925,000. The proceeds of the 2010 Series DE Bonds were used to provide \$372,688,800 in additional funds for the WSIP.

• The SFPUC issued the 2010 Series FG Bonds on December 22, 2010, in the aggregate principal amount of \$532,430,000. The proceeds of the 2010 Series FG Bonds were used to provide \$437,979,757 in additional funds for the WSIP.

• The SFPUC issued the 2011 Series ABCD Bonds on August 4, 2011, in the aggregate principal amount of \$720,750,000. The proceeds of the 2011 Series ABCD Bonds were used to provide \$525,000,000 in additional funds for the WSIP.

See "OBLIGATIONS PAYABLE FROM REVENUES."

The following table sets forth the previously issued debt for the WSIP and a projected debt financing schedule for the WSIP through Fiscal Year 2013-14 based on the 2011 Approved Budget. The amounts in this table include the outstanding Bonds described above and the anticipated proceeds of the 2012 Sub-Series A Bonds. New bond issues are assumed to be bonds secured by a parity lien on Revenues. The repayment of principal and interest on these future debt issues has been incorporated into the SFPUC's approved rates through Fiscal Year 2013-14.

#### TABLE 12

#### HISTORICAL AND PROJECTED WSIP BOND ISSUANCE SCHEDULE (IN THOUSANDS)

<b>Fiscal Year</b>	<b>Total Bond Issuance</b> *
2002-03 - 2008-09	\$ 507,815 <sup>(1)</sup>
2009-10	1,241,720 (2)
2010-11	947,990 <sup>(3)</sup>
2011-12	1,202,715 (4)
2012-13	$0^{(4)}$
2013-14	553,220 <sup>(4)</sup>
2014-15	132,096 (4)
Total:	\$4,585,556

\* Preliminary; subject to change.

<sup>1)</sup> Of the amount originally issued, \$470,310,000 aggregate principal amount currently remains outstanding as of February 1, 2012.

 (2) Amount shown includes 2009 Series A Bonds, 2009 Series B Bonds and 2010 Sub-Series B Bonds.

(3) Amount shown represents only the amounts attributable to WSIP costs funded by the 2010 Series DE Bonds and the 2010 Series FG Bonds.

(4) Amount shown includes WSIP costs funded by the 2011 Sub-Series A Bonds and costs expected to be funded by the 2012 Sub-Series A Bonds. The timing and amount of future debt issuances are estimates.

Note: Certain amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC, Financial Services

#### **NON-WSIP CAPITAL IMPROVEMENTS**

The capital plan for the City for Fiscal Years 2011-12 through 2015-16 includes capital project costs for the Water Enterprise (not including WSIP) as set forth in the table below. Non-WSIP capital investments include but are not limited to water conveyance, water storage, meter replacement, facilities maintenance and security.

In general, SFPUC capital projects include either new construction of an asset with a useful life of at least 5 years, or repair and replacement to improve performance or extend the service life of an existing asset. Repair and replacement projects, which are annual ongoing projects such as replacement of City water distribution pipes, are typically funded by water revenues on a pay-as-you-go basis, but at times may be bond-funded.

The table below shows projected Water Enterprise Non-WSIP capital improvements budgeted through June 30, 2016.

### TABLE 13NON-WSIP CAPITAL IMPROVEMENTS

	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	Total
Hetchy Water Capital Improvements	\$14,724,800	\$24,877,550	\$27,987,550	\$31,082,750	\$36,012,750	\$134,685,400
Local Water Main Replacement	28,651,000	51,585,000	66,700,000	65,200,000	74,700,000	286,836,000
Regional Water Capital Projects	2,073,000	14,254,000	27,001,000	22,982,000	0	66,310,000
Total	\$45,448,800	\$90,716,550	\$121,688,550	\$119,264,750	\$110,712,750	\$487,831,400

Source: SFPUC, Financial Services

See "PLAN OF FINANCE."

#### FINANCIAL OPERATIONS

#### General

The SFPUC is a department of the City and, as such, the financial operations of its three enterprises are included in the Comprehensive Annual Financial Report of the City and shown as enterprise funds.

The following information is provided with respect to the Water Enterprise only and does not purport to reflect the financial position of the SFPUC or the City as a whole.

#### **Basis of Accounting**

The accounts of the Water Enterprise are organized on the basis of a proprietary fund type, specifically an enterprise fund. The financial activities of the Water Enterprise are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with its operations are included on the statement of net assets; revenues are recorded when earned, and expenses are recorded when liabilities are incurred.

The Water Enterprise applies all applicable GASB pronouncements, as well as statements and interpretations of the FASB, Accounting Principles Board Opinions, and Accounting Research Bulletins of the Committee on Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

#### **City Budget Process**

The SFPUC budget is a part of the overall budget prepared annually by the City. Each year, the SFPUC's proposed budget is prepared by SFPUC staff and then submitted to the Commission for approval before being submitted to the Mayor. The Mayor's Office reviews and may amend the SFPUC's proposed budget, and then incorporates the proposed budget into the total City budget that is submitted to the Board of Supervisors for approval. Under the Charter, the Board of Supervisors may increase or decrease any proposed expenditure in the Mayor's budget so long as the aggregate changes do not cause the expenditures to exceed the total amount of expenditures proposed by the Mayor. The Charter further provides that the Mayor may reduce or reject any expenditure authorized by the Board of Supervisors except appropriations for bond interest, redemption or other fixed charges, subject to reinstatement of any such expenditure by a two-thirds vote of the Board of Supervisors.

With the passage of Proposition A in 2009, the SFPUC develops and proposes a two-year budget.

#### **Sources of Revenue**

The Water Enterprise's principal source of revenue is the sale of water to its Retail Customers and Wholesale Customers, as shown below for Fiscal Year 2010-11.

Fiscal Year 2010-11 (\$thousand)				
Retail water sales	\$129,186	42.26%		
Wholesale water sale142,20146.52				
Other Revenue	34,291	11.22		
Total	\$305,678	100.00%		

#### Source: SFPUC, Financial Services

Non-operating Other revenue shown above includes rental income, interest earnings, capacity fees, and other revenues.

The setting of water rates by the City is not subject to any State or federal regulatory approval. The SFPUC's ability to generate revenue may be limited by certain provisions of the State Constitution and the Charter of the City. See "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS."

#### Wholesale Water Sales Revenue

*Wholesale Rate-Setting Process*. Wholesale Customer rates are determined based upon the Wholesale Customers' collective share of the Water Enterprise's total revenue requirements, known as the "Suburban Revenue Requirement" in the former Master Water Sales Contract and the "Wholesale Revenue Requirement" in the Water Supply Agreement.

The Suburban Revenue Requirement under the former Master Water Sales Contract consisted of the sum of the Wholesale Customers' allocated shares of the following costs of the Water Enterprise in providing water to the Wholesale Customers: operating and maintenance expenses, administrative and general expenses, property taxes, return on rate base, depreciation on the wholesale portion of Water Enterprise facilities and the "Suburban Hetch Hetchy Assessment," the costs of operating the Hetch Hetchy Project allocated exclusively to the Water Enterprise or jointly to the Water Enterprise and the Power Enterprise. These basic categories of cost recovery are continued under the Water Supply Agreement, with the exception of return on rate base and depreciation for new Regional Water System assets, the cost of which are instead recovered under the cash method as needed to cover revenue-funded capital projects and debt service associated with bond-funded capital projects.

Under the Water Supply Agreement, the cost of service for suburban resale is calculated on the same "cash basis" as retail rates. Using the cash basis, the cost of service for Wholesale Customers will include a pro-rata share of operation and maintenance expense plus a pro-rata share of debt service and appropriations for revenue-funded capital improvements of the Regional Water System.

In addition to a pro-rata share of operation and maintenance expense, debt service and revenue-funded capital, the Wholesale Customers will pay a fixed annual charge to reimburse the Water Enterprise for a pro rata share of undepreciated investment in facilities capitalized prior to July 1, 2009. The SFPUC and the Wholesale Customers have agreed to allow the Wholesale Customers to repay the undepreciated value of existing assets as well as construction work in progress as of June 30, 2009, in equal annual payments over the 25 years of the Water Supply Agreement at an annual interest rate of 5.13%. The SFPUC and the Wholesale Customers have also agreed to allow the Wholesale Customers to reimburse the Water Enterprise for any revenue-funded project expenditures made in Fiscal Year 2009-10 through Fiscal Year 2011-12 using funds appropriated, but unspent, prior to July 1, 2009 over 10 years with repayment beginning in Fiscal Year 2014-15 at an annual interest rate of 4.00%.

Finally, the Water Supply Agreement contains a rate device known as the balancing account. Any difference between the revenues received and the actual earned revenues associated with the allocated cost of wholesale service is placed in the balancing account and used to adjust the following year's rate recovery up or down depending on whether there is a shortfall or surplus in the balancing account. The projected year-end amount in the balancing account for Fiscal Year 2011-12 is \$22,891,436 owed by the Wholesale Customers to the Retail Customers. The Water Supply Agreement provides that a credit for the old Master Water Sales Agreement Balancing Account will be paid in annual installments of not less than \$2 million nor more than \$5 million. For Fiscal Year 2011-12, the annual installment is assumed to be \$5 million. The Fiscal Year 2011-12 rates also assume a balance of \$13,772,074 in the Water Supply Agreement Balancing Account.

The operating costs and plant investment for Hetch Hetchy Water and Power are allocated in a similar manner. Costs are first classified as power-specific, water-specific and joint. The water related costs are then allocated between retail and wholesale customers based on their pro-rata share of water delivered.

*Statutory and Contractual Limits on Wholesale Water Rates.* The sale and delivery of water to the Wholesale Customers under the Water Supply Agreement are subject to the "Rules and Regulations Governing Water Service to Customers" of the Water Enterprise adopted by the Commission, and as they may from time to time be amended, that are (1) applicable to the sale and delivery of water to the Wholesale Customers, (2) reasonable, and (3) not inconsistent with either the Water Supply Agreement or with an Individual Contract.

*Wholesale Water Rate Adjustments*. Under the Water Supply Agreement, adjustments to the Wholesale Customers' rate schedules, other than emergency rate adjustments and drought pricing, discussed below, are coordinated with the budget development process. If the SFPUC desires to increase Wholesale Customer rates, it is required to provide certain yearly budget information to the Wholesale Customers prior to adoption of any such rate increases. Failure to do so will not prohibit the SFPUC from adoption of such rates, but, in the event of such failure, the Wholesale Customers may either invoke arbitration, or seek injunctive relief to compel the SFPUC to remedy the failure as soon as reasonably practical.

The SFPUC may increase the water rates applicable to the Wholesale Customers without compliance with the above described procedures in the event a drought, earthquake, other act of God, malfunctioning of the Regional Water System or other emergency which requires an increase in rates. Rates may be increased on an emergency basis to cover operating expenses and capital costs. Any such emergency rate increase must be accompanied by a rate increase for Retail Customers of an equal percentage.

Any emergency rate surcharge adopted by the Commission will remain in effect only until the next budget coordinated rate-setting cycle.

Drought pricing for Wholesale Customers, if required, could also be changed under similar terms and conditions set forth for emergency rate increases. Any drought-related pricing or surcharge adopted by the Commission would also remain in effect only until the next budget coordinated rate-setting cycle.

*Historical Wholesale Water Rate Adjustments.* The following table lists wholesale water rate adjustments since Fiscal Year 1991-92 for the Wholesale Customers.

Date	Change in Wholesale Rates <sup>(1)</sup>
July 1991	
July 1991	
July 1993	
July 1994	. ,
July 1995	
July 1996	
July 1997	
July 1998	
July 1999	
July 2000	) 4.4
July 2001	
July 2002	2 0.0
July 2003	3 25.7
July 2004	
July 2005	$(9.7)^{(2)}$
July 2006	5 18.8
July 2007	6.3
July 2008	3 10.0
July 2009	) 15.7
July 2010	) 15.2
July 2011	38.4

#### TABLE 14 HISTORICAL PERCENTAGE INCREASES (DECREASES) IN WHOLESALE WATER RATES

 Wholesale rates are set prospectively based on an estimate of the Wholesale Revenue Requirement. As such, rates may increase or decrease significantly from year to year.
 Adjustment effective April 1, 2005.

Source: SFPUC, Audited Financial Statements, and SFPUC Financial Services

*Arbitration for Disputes.* The Master Water Sales Contract had a binding arbitration provision for disputes related to wholesale rate setting by the SFPUC. The SFPUC and its Wholesale Customers arbitrated one dispute over the 25-year term of the agreement and settled several other disputes short of arbitration. The Water Supply Agreement continues the practice of binding arbitration for rate-related disputes.

#### **Retail Water Sales Revenue**

**Retail Rate Structure.** Retail Customers pay a flat monthly service charge based on the size of the meter plus a volumetric charge for all water delivered based on one-month meter readings. Volumetric charges for singleand multi-family residential customers are based on a two-tiered rate structure, where the first tier is applicable to the first 3 CCF of use per month and the second tier is applicable to all additional use. Volumetric charges for nonresidential customers are based on a uniform rate. The table below details retail water rates for Fiscal Year 2011-12.

#### TABLE 15 RATES FOR RETAIL WATER SERVICE IN SAN FRANCISCO AS OF JULY 1, 2011

	Single-Family Residential (\$/CCF) <sup>(1)</sup>	Multi-Family Residential (\$/CCF)	Non-Residential (\$/CCF)
Uniform	-	-	4.52
Tier 1 (0-3 CCF)	3.50	3.70	-
Tier 2 $(3+CCF)$	4.60	4.90	-

<sup>(1)</sup> One "CCF" equals one hundred cubic feet of water (equal to 748 gallons). Source: SFPUC, Financial Services

The following table shows a comparison of typical monthly charges for representative Retail Customer classes based on average use.

# TABLE 16MONTHLY CHARGES FOR RETAIL WATER SERVICEIN SAN FRANCISCOAS OF JULY 1, 2011

					Total Monthly
	Average	Meter	Fixed	Volume	Charges
Customer Type	Use (CCF)	Size	Charge	Charge	(Volume + Fixed)
Average Single Family Residence	6	5/8"	\$ 7.00	\$ 24.30	\$31.30
Larger Single Family Residence	15	3/4"	8.60	65.70	74.30
Large Apartment Building	525	4"	74.70	2,568.90	2,643.60
Large Office	983	4"	74.70	4,443.16	4,517.86
Department Store	2,199	4"	74.70	9,939.48	10,014.18
Hotel	7,811	8"	230.00	35,305.72	35,535.72

Source: SFPUC, Financial Services

**Retail Rate-Setting Process.** The SFPUC is authorized and required under the Charter and Proposition E to set rates, fees and other charges in connection with providing the utility services under its jurisdiction, subject to rejection – within 30 days of submission – by resolution of the Board of Supervisors. If the Board of Supervisors fails to act within 30 days, the rates will become effective without further action.

Under the Charter, in setting retail rates, fees and charges (for water and for the sewer and power utility services it provides) the SFPUC is required to take the following actions:

(1) Establish rates, fees and charges at levels sufficient to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities of each enterprise under its jurisdiction, meet requirements and covenants under all bond resolutions and indentures (including, without limitation, increases necessary to pay for the Retail Customers' share of the debt service on bonds and operating expenses of any State financing authority), and provide sufficient resources for the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise, consistent with good utility practice.

- (2) Retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years, the most recent of which was performed during Fiscal Year 2008-09.
- (3) Set retail rates, fees and charges based on the cost of service.
- (4) Conduct all studies mandated by applicable State and federal law to consider implementing connection fees for water and clean water facilities servicing new development.
- (5) Conduct studies of rate-based conservation incentives and/or lifeline rates and similar rate structures to provide assistance to low income users, and take the results of such studies into account when establishing rates, fees and charges, in accordance with applicable State and federal laws.
- (6) Adopt annually a rolling 5-year forecast of rates, fees and other charges.
- (7) Establish a Rate Fairness Board consisting of seven members: the City Administrator or his or her designee; the Controller or his or her designee; the Director of the Mayor's Office of Public Finance or his or her designee; two residential Retail Customers, consisting of one appointed by the Mayor and one by the Board of Supervisors; and two business Retail Customers, consisting of a large business customer appointed by the Mayor and a small business customer appointed by the Board of Supervisors.

Retail rates and the retail rate-setting process must also comply with the requirements of the State Constitution, including notice, protest and public hearing requirements. See "CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS—Proposition 218."

**Retail Water Rate Adjustments.** The SFPUC's retail rates and charges for delivered water are set to equal the cost of operation, maintenance, replacement, debt service and other costs incurred in gathering, treating and delivering water for consumptive and other uses in the City and other areas receiving retail service from the Water Enterprise. The SFPUC has regularly reviewed and often increased its retail water rates to fund operating and capital costs, including the WSIP.

The following table lists retail water rate adjustments since Fiscal Year 1991-92, as well as approved future rate increases through Fiscal Year 2013-14.

#### TABLE 17 HISTORICAL AND APPROVED FUTURE PERCENTAGE INCREASES (DECREASES) IN RETAIL WATER RATES

Date	Retail Rates
July 1991	14.0%
July 1992	18.0
July 1993	13.7
July 1994	14.0
July 1995	0.0
July 1996	7.6
July 1997	0.0
July 1998	0.0 (1)
July 1999	0.0 (1)
July 2000	0.0 (1)
July 2001	8.7 <sup>(1)</sup>
July 2002	8.6 <sup>(1)</sup>
July 2003	0.0 (1)
July 2004	0.0 (1)
July 2005	15.0 <sup>(1)</sup>
July 2006	15.0 <sup>(1)</sup>
July 2007	15.0 <sup>(2)</sup>
July 2008	15.0
July 2009	15.0 <sup>(3)</sup>
July 2010	$15.0^{(3)}$
July 2011	12.5 <sup>(3)</sup>
July 2012	$12.5^{(3)}$
July 2013	6.5 <sup>(3)</sup>
5	

(1)	Proposition H, approved by San Francisco voters
	on June 2, 1998, froze retail water rates at then-
	current levels, subject to certain exceptions
	(including a limited exception to raise rates to pay
	debt service on voter-approved debt), through July
	1, 2006.
(2)	Adjustment effective July 14, 2007.
(3)	Based on five-year rate schedule covering July 1,
	2009 to June 30, 2014 approved in May 2009.

Source: SFPUC, Financial Services.

The SFPUC may make adjustments from time to time in such rates, fees and charges and may make such classification of rates, fees and charges as it deems necessary, but will not reduce such rates, fees and charges below those then in effect unless the Revenues resulting after such reduced rates, fees and charges are put into effect will at all times be sufficient to meet the rate covenants set forth in the Indenture. See "SECURITY FOR THE BONDS – Rate Covenants."

*Billing and Collection Procedures.* All Retail Customers are billed on the basis of metered water use. Residential, small commercial and municipal accounts are billed bi-monthly. Larger commercial and industrial accounts are billed monthly. In the event of non-payment, the SFPUC has authority and power to discontinue service and, in owner-occupied buildings and master metered apartment buildings, to record liens on property.

**Delinquencies.** The table below shows the delinquency in collection of water charges from Retail Customers as of June 30, 2011. The SFPUC considers its rates of payment delinquency, service discontinuance for non-payment, and write-offs for uncollectible accounts to be low by water industry standards for urban areas.

#### TABLE 18A ACCOUNTS RECEIVABLES AGING REPORT AS OF DECEMBER 31, 2011

Period	Amount (1)	Percent of Total	Percent of Total 2010-11 Revenues
Current	\$54,939,340	86.02%	17.97%
31 - 60 Days	2,171,278	3.40	0.71
61 - 90 Days	736,886	1.15	0.24
Over 90 Days	6,020,298	9.43	1.97
Total	\$63,867,803	100.00%	
Credit Balances	(263,599)		
Total Aged Receivables	63,604,204		
Less Allowance For Doubtful Accounts	(1,439,061)		
Accounts Receivable, Net of Allowance	\$62,165,143		

(1) Excludes receivables from municipal customers. Source: SFPUC, Financial Services.

The following table shows a five-year history of write-offs for uncollectible accounts.

### TABLE 18B WRITE-OFFS FOR UNCOLLECTIBLE ACCOUNTS

		% of Total
	Amount	Revenues
2007	\$ 3,245	0.001%
2008	2,961	0.001
2009	50,362	0.016
2010	3,212	0.001
2011	8,492	0.003

*Comparative Retail Water Rates.* The following table shows a comparison of monthly charges by selected local water purveyors for a typical residential account with a 5/8-inch meter using 7 CCF (700 cubic feet) of water per month, which is the historical average monthly use for SFPUC single-family residential customers. It should be noted that the historical average monthly use for the residential customers of the SFPUC's Wholesale Customers is approximately 14 CCF.

## TABLE 19COMPARATIVE MONTHLY RESIDENTIAL WATER CHARGESAS OF FEBRUARY 2012

Water Purveyor	Monthly Charge <sup>(1)</sup>
Contra Costa County Water District	\$35.19
City of Palo Alto	31.60
San Francisco Public Utilities Commission	31.30
East Bay Municipal Utility District	28.46
City of Santa Clara	27.14
Alameda County Water District	26.38
City of Hayward	25.80

<sup>(1)</sup> Based on monthly usage of 6 CCF. Source: SFPUC, Financial Services

#### **Capacity Charges**

The SFPUC imposes a capacity charge on any Retail Customer requesting a new connection to the water distribution system, or requiring additional capacity as a result of any addition, improvement, modification or change in use of an existing connection to the water distribution system. As of July 1, 2011, the capacity charge is \$1,133 per equivalent 5/8 inch meter. The capacity charge is adjusted on July 1 of each year by the annual change in the 20 City Average Construction Cost Index published by ENR Magazine.

#### **Operating and Maintenance Expenses**

"Operating and Maintenance Expenses" cover the general operations expenses of the Water Enterprise. These expenses include labor and fringe benefits, contractual services, materials and supplies, depreciation, general and administrative, services from other departments and other miscellaneous costs. See "HISTORICAL OPERATING RESULTS." Service from other departments include payment for services from other City departments, such as the City Attorney's Office, and the General Services Agency. Operating and Maintenance Expenses include payments to Hetch Hetchy Water and Power for services related to water storage and delivery. See "– Inter-Enterprise Transfers" and "SECURITY FOR THE BONDS – Rate Covenants."

#### **Employee Benefit Plans**

SFPUC employees are City employees and are covered by benefit plans offered through the City.

**Retirement System Plan Description**. The SFPUC participates in the City's single employer defined benefit retirement plan (the "Plan") which is administered by the San Francisco City and County Employees' Retirement System (the "Retirement System"). The Plan covers substantially all full time employees of the SFPUC along with other employees of the City. The Plan provides basic service retirement, disability, and death benefits based on specified percentages of final average salary, and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The City Charter and City Administrative Code are the authority which establishes and amends the benefit provisions and employer obligations of the Plan.

*Plan Financial Reports.* The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 30 Van Ness Avenue, Suite 3000, San Francisco, CA 94102, or by calling (415) 487-7020.

**Retirement System Funding Policy**. Contributions to the basic plan are made by both the SFPUC and its employees. Employee contributions are mandatory. Employee contribution rates for fiscal years 2011, 2010 and 2009 varied from 7.5% to 8.0% as a percentage of covered payrolls. Due to certain bargaining agreements, the Commission contributed from 0.5% to 8.0% of covered payroll on behalf of some employees.

The contributions made by the Water Enterprise for the prior three fiscal years were as follows:

	Actuarially Determined		Percent of
	Rate as a Percentage of		Required
Fiscal Year	Covered Payroll	Contribution	Contribution
2008-09	5.0%	\$6,946,000	100%
2009-10	9.5	12,283,000	100
2010-11	13.6	16,453,000	100

**Projected Future Contributions and Pension Costs.** On April 7, 2011 the City Controller's Office, the Mayor's Office and the Board of Supervisors' Budget Analyst issued their Joint Report and 3-year Budget Projection for the General Fund Supported Operations. Included in the Joint Report are projections related to the City's contribution to the Plan. The projection assumes employer pension contributions to the San Francisco Employee Retirement System (SFERS) in accord with a projection scenario within the Cheiron Consulting Group Actuarial Valuation as of July 1, 2010 provided to the Retirement Board in January 2011. The projection assumes that the Plan achieves its target 7.75% investment return each year and anticipates a rise in SFERS employer contributions from 13.6% in Fiscal Year 2010-11 to 18.1% in Fiscal Year 2011-12, to 21.0% and 26% in Fiscal Year 2012-13 and Fiscal Year 2013-14, respectively. Employer contributions to the California Public Employees' Retirement System (CalPERS), which covers some public safety personnel, are assumed to rise at a similar rate.

Total retirement costs are projected to increase due to recent investment losses in the SFERS and CalPERS, the increased cost of SFERS benefits due to Proposition B (June 2008), and lower projected earnings on retirement plan assets. This is comprised of contributions into CalPERS and SFERS as follows:

*Health Care Benefits.* Health care benefits of the SFPUC employees, retired employees and surviving spouses are financed by beneficiaries and by the City through the City and County of San Francisco Health Service System (the "Health Service System"). Contributions are determined by a San Francisco Charter provision based on similar contributions made by the 10 most populous counties in California.

The Water Enterprise's annual contribution amounted to approximately \$20,952,000 and \$19,347,000 in fiscal years 2011 and 2010, respectively. Included in these amounts are \$5,214,000 and \$4,442,000 for 2011 and 2010, respectively, to provide post-retirement benefits for Water Enterprise retired employees, on a pay-as-you-go basis.

There was no additional City allocation to the SFPUC contribution allocation for payments made from the Health Service System for post-retirement health benefits in 2011 and 2010.

The City has determined a Citywide Annual Required Contribution ("ARC"), interest on net other postemployment benefits other than pensions ("OPEB") obligation, ARC adjustment, and OPEB cost based upon an actuarial valuation performed in accordance with GASB 45, by the City's actuaries. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost of each year and any unfunded actuarial liabilities (or funding excess) amortized over thirty years. The City's allocation of the OPEB related costs to the SFPUC for the year ended June 30, 2011 based upon its percentage of Citywide payroll costs is presented below.

The City issues a publicly available financial report for Citywide level that includes the complete note disclosures and required supplementary information related to the City's post-retirement health care obligations. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, CA 94102, or by calling (415) 554-7500.

#### TABLE 22 ANNUAL OPEB OBLIGATION BY ENTERPRISE FOR THE FISCAL YEAR ENDING JUNE 30, 2011 (IN THOUSANDS)

			2011		
			Hetch Hetchv	Hetch Hetchv	SFPUC
	Water	Wastewater	Water	Power	Total
Annual required contribution	\$19,533	\$7,071	\$1,846	\$2,254	\$30,704
Interest on net OPEB obligation	1,842	667	174	213	2,896
Adjustment to ARC	(1,445)	(523)	(136)	(167)	(2,271)
Annual OPEB cost (expense)	19,930	7,215	1,884	2,300	31,329
Contribution made	(5,214)	(2,420)	(646)	(789)	(9,069)
Increase in net OPEB obligation	14,716	4,795	1,238	1,511	22,260
Net OPEB obligation – beginning of year	45,598	16,078	2,431	6,041	70,148
Net OPEB obligation – end of year	60,314	20,873	3,669	7,552	92,408

			2010		
	Water	Wastewater	Hetch Hetchy Water	Hetch Hetchy Power	SFPUC Total
Annual required contribution	\$18,790	\$6,630	\$1,170	\$2,616	\$29,206
Interest on net OPEB obligation	1,312	463	76	188	2,039
Adjustment to ARC	(1,029)	(363)	(59)	(148)	(1,599)
Annual OPEB cost (expense)	19,073	6,730	1,187	2,656	29,646
Contribution made	(4,442)	(2,065)	(336)	(834)	(7,677)
Increase in net OPEB obligation	14,631	4,665	851	1,822	21,969
Net OPEB obligation – beginning of year	30,967	11,413	1,580	4,219	48,179
Net OPEB obligation – end of year	45,598	16,078	2,431	6,041	70,148

Source: SFPUC Audited Financial Statements for the Water Enterprise, Fiscal Year ending June 30, 2010; SFPUC, Financial Services.

**Unfunded Actuarial Accrued Liability.** The City Unfunded Actuarial Accrued Liability ("UAAL") was \$4.0 billion at June 30, 2008. The amount allocable to the SFPUC Water Enterprise is 5.03% or \$203.0 million, which will be amortized over 30 years.

#### TABLE 23 ESTIMATED OPEB UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) BY ENTERPRISE (IN THOUSANDS)

	Percent of Total	UAAL at July 1, 2008
Total City	100.00%	\$4,036,324
Water Enterprise <sup>(1)</sup>	5.03	203,027
Wastewater Enterprise <sup>(1)</sup>	1.84	74,268
Hetch Hetchy Power and Water Enterprise <sup>(1)</sup>	0.89	35,923

<sup>(1)</sup> Consistent with the City's election, the SFPUC will amortize its UAAL over 30 years. The amount of the SFPUC's UAAL and the amount to be recognized every year may vary as a result of future actuarial assumptions and calculations. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC, Financial Services

An actuarial study dated December 13, 2010, indicates that the City's UAAL increased approximately 8% to \$4.36 billion at June 30, 2010. While the amount allocable to the Water Enterprise has not yet been determined,

the SFPUC expects that the amount of the City's UAAL allocable to the Water Enterprise will increase by a similar percentage.

**Pension and Health Care Cost Reforms.** City voters have implemented pension and health care cost reforms in recent years to help mitigate future cost increases. These include the passage of Proposition C in November 2011, which had the effect of requiring employees to pay increased amounts for pension benefits during periods of weak stock and bond market performance, and to require employee contributions toward their retiree health care, and the passage of Proposition B in June 2008, which also required new employees to contribute toward their retiree health care. Both measures were intended to help address unfunded retiree health care liabilities.

#### **Debt Management and Fund Balance Reserve Policies**

The SFPUC has established Debt Management Policies and Procedures for debt financing under its jurisdiction. These policies are intended to enable the SFPUC to effectively manage its debt issuance and debt management practices. The SFPUC has also established a Fund Balance Reserve Policy. The Fund Balance Reserve Policy states that operating and capital plans, budgets and rates will be projected and proposed for adoption such that all bond indenture requirements are met or exceeded and that Operating Fund Balance Reserves meet one or more of the following: total at least 15% annual revenues; total at least 15% of annual expenditures; and result in Debt Service Coverage, on a bond indenture basis, including fund balance reserves available to pay debt service, of at least 1.25 times.

These policies and procedures are reviewed and are revised as necessary with Commission approval, with the latest approval on February 11, 2010. The Commission may also approve exceptions to adherence to these policies.

The SFPUC makes no representation that these policies will not be revised or amended and, except to the extent required for compliance with the terms of the Indenture, the SFPUC makes no representation that these policies will be followed by the SFPUC.

#### Allocation of Costs

Various common costs incurred by the SFPUC are allocated among the Water Enterprise, the Power Enterprise, and the Wastewater Enterprise. Allocations are based on the SFPUC management's best estimate and may change from year to year depending on activities undertaken by each enterprise and information available. The most recent cost allocation review was completed in 2009.

For Fiscal Year 2011-12, the SFPUC budgeted \$38.7 million in administrative costs to the Water Enterprise, which is recorded as personal service expenses and also in other various operating expenses in the Water Enterprise financial statements. For Fiscal Year 2010-11, the SFPUC allocated \$35.9 million in administrative costs to the Water Enterprise.

#### **Inter-Enterprise Transfers**

An annual transfer occurs from the Water Enterprise to Hetch Hetchy Water and Power to pay for services related to water storage and delivery. The budgeted transfer amount is \$30.6 million for Fiscal Year 2011-12, and was \$29.7 million for Fiscal Year 2010-11. An additional transfer related to power purchases is budgeted at \$6.7 million for Fiscal Year 2011-12 and was \$6.8 million in Fiscal Year 2010-11. Should Hetch Hetchy Water and Power incur higher capital costs or higher operating costs in the future, the amount of this transfer could increase.

#### Payments to/from the City

*Payments to City for Interdepartmental Services.* A variety of City departments provide services such as engineering, purchasing, legal, data processing, telecommunications, and human resources to the Water Enterprise and charge amounts designed to recover those costs. These charges totaled \$7.4 million for Fiscal Year 2010-11, and are budgeted at \$9.4 million for Fiscal Year 2011-12.

*Lease Certificate of Participation Financing.* On October 7, 2009, the City issued \$167.67 million in fixed-rate Certificates of Participation, Series 2009 C and D, to fund the future headquarters of the SFPUC at 525 Golden Gate Avenue. Pursuant to a Memorandum of Understanding between the City and the SFPUC, the SFPUC will reimburse the City General Fund for all costs in connection with this City financing. This obligations is subordinate to debt service on the Bonds and payments related thereto are allocated among the three SFPUC Enterprises. See "OBLIGATIONS PAYABLE FROM REVENUES—Other Obligations Payable from Revenues."

*Water Payments from Other Agencies.* The SFPUC receives payments from other agencies of the City for their share of the proportionate cost of the service provided to them. In prior fiscal years, the Water Enterprise delivered water without charge to certain City departments. In Fiscal Year 2007-08, the Water Enterprise began charging all City departments for water (with the exception of itself and Fire Department for water dispensed from fire hydrants). The Water Enterprise collected payments from other City agencies totaling approximately \$6.4 million in Fiscal Year 2009-10 and \$6.1 million in Fiscal Year 2010-11.

#### **Investment of SFPUC Funds**

The SFPUC's pooled deposits and investments are invested pursuant to State law and the investment policy established by the City Treasurer and overseen by the Treasury Oversight Committee. This policy seeks the preservation of capital, liquidity and yield, in that order of priority. The policy addresses the soundness of the financial institutions that hold City assets and the types of investments permitted by the California Government Code.

The earned income yield for the current fiscal year was 1.29% per annum as of April 30, 2012.

The SFPUC's non-pooled deposits and investments consist primarily of funds related to the SFPUC's outstanding bonds, which are invested pursuant to policy established by the SFPUC, subject to the restrictions contained in the applicable bond documentation.

#### **Risk Management and Insurance**

The SFPUC's risk management program encompasses both self-insured and insured coverage. Risk assessments and coverage are coordinated by the SFPUC Enterprise Risk Manager through the City Office of Risk Management. With certain exceptions, the City and SFPUC's general policy is to first evaluate self-insurance for the risk of loss to which it is exposed. Based on this analysis, the SFPUC has determined that mitigating risk through a "self-retention" mechanism is more economical as it manages risks internally and administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e., pay-as-you-go). When economically more viable or when required by debt financing covenants, the SFPUC obtains commercial insurance.

At least annually, the City reviews and actuarially determines general liability and workers' compensation liabilities, which are recorded as "Damages and Claims" and "Accrued Worker's Compensation" in the financial statements.

The SFPUC does not maintain commercial earthquake coverage for the Water Enterprise, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the Property Insurance program.

The following is a summary of the SFPUC's coverage approach to risk:

Primary Risks	Typical Coverage Approach
General Liability	Self-Insure
Property	Purchased Insurance & Self-Insure
Workers' Compensation	Self-Insure through City Pool
Other Risks	Typical Coverage Approach
Surety Bonds	Purchased and Contractually Transferred
Professional Liability	Combination of Self-Insure, Purchased Insurance and Contractual Risk Transfer
Errors & Omissions	Combination of Self-Insure, Purchased Insurance and Contractual
	Risk Transfer
Builders Risk	Purchased Insurance & Contractual Risk Transfer
Public Official Liability	Purchased Insurance

The SFPUC's property risk management approach varies depending on whether the facility is currently under construction, or if the property is part of revenue-generating operations. The majority of purchased insurance program is for revenue-generating facilities, debt-financed facilities, and mandated coverage to meet statutory or contractual requirements.

The SFPUC has purchased a public officials liability insurance policy for all public officials with financial oversight responsibilities, including Commissioners, the General Manager and the Chief Financial Officer. The SFPUC has also purchased a crime insurance policy in lieu of bonding its employees.

Additionally, the SFPUC has implemented an Enterprise Risk Management program for the Business & Financial Services Bureau. The framework provides a strategic approach to managing operational risks of the organization through a coordinated process that identifies, assesses, treats, and monitors risks. The SFPUC acknowledges the importance of aligning strategic planning to the risk management process and intends to continue implementation across the organization.

*Capital Project Risk Management*. For capital construction projects, the SFPUC has utilized traditional contractual risk transfer, owner-controlled insurance programs or other alternative insurance programs. Under the latter two approaches, the insurance program usually provides coverage for the entire construction project, along with multiple risk coverages, such as general liability and workers compensation. When a contractual risk transfer is used for capital construction risks, the SFPUC requires each contractor to provide its own insurance, while ensuring that the full scope of work be covered with satisfactory levels to limit the SFPUC's risk exposure balanced by that which is commercially available.

Bonds are required, unless Builder's Risk is purchased, in most phases of the construction contracting process for such phases, as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty.

Professional liability policies are either directly purchased insurance on behalf of the SFPUC, transferred through contract to the contracted professional, or retained through self-insurance on a case by case basis depending on the size, complexity or scope of construction or professional service contracts. Professional liability policies are typically purchased for services provided by engineers, architects, design professionals and other licensed or certified professional service providers.

Builder's Risk policies of insurance are required to be provided either through an owner-controlled insurance program or the contractor on all construction projects for the full value of the construction.

#### **HISTORICAL OPERATING RESULTS**

#### Summary of Historical Operating Results and Debt Service Coverage

The historical results of operations reflected in the table below are based on the tables contained in the Financial Statements entitled "Statements of Revenues, Expenses and Changes in Net Assets" and "Statements of Cash Flows" for the Fiscal Years listed. See "APPENDIX E—SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS." The calculation of debt service coverage includes net operating income and funds not budgeted to be spent in the next twelve months and legally available to pay debt service, as permitted under the Indenture.

#### TABLE 24

#### HISTORICAL REVENUES, OPERATING & MAINTENANCE EXPENSES AND DEBT SERVICE COVERAGE FOR FISCAL YEARS ENDED JUNE 30 (IN THOUSANDS)<sup>(1)</sup>

	2007	2008	2009	2010	2011
<b>OPERATING AND INVESTMENT REVENUES</b>					
Retail Water Sales	\$ 94,339	\$ 100,892	\$ 115,833	\$ 119,166	\$ 129,186
Wholesale Water Sales	108,448	115,927	131,831	129,203	142,201
Subtotal - Water Sales	202,787	216,819	247,664	248,369	271,387
Rental Income	9,929	9,645	9,399	8,584	9,388
Other Revenues	3,815	7,752	8,092	7,655	6,751
Investing Activities	24,547	12,456	7,088	9,823	17,283
Capacity Fees <sup>(2)</sup>	0	213	626	610	869
Total Revenues	241,078	246,885	272,869	275,041	305,678
OPERATING AND MAINTENANCE EXPENSE					
Labor and Fringe Benefits	87,200	102,233	106,869	108,178	111,363
Contractual Services	12,437	11,292	13,619	13,087	15,586
Materials and Supplies	10,661	11,506	12,671	12,748	13,839
Depreciation	43,895	45,958	49,100	52,571	58,752
General and Administrative	4,523	8,209	2,982	25,917	6,311
Services of Other Departments	33,242	34,698	40,103	47,574	46,308
Other	10,540	9,156	22,971	17,895	9,768
Total Expenses	202,498	223,052	248,315	277,970	261,927
OPERATING AND INVESTMENT INCOME	\$ 38,580	\$ 23,833	\$ 24,554	\$ (2,929)	\$ 43,751
COVERAGE CALCULATION <sup>(3)</sup>					
Operating and Investment Income	\$ 38,580	\$ 23,833	\$ 24,554	\$ (2,929)	\$ 43,751
+ Adjustment to Investing Activities <sup>(4)</sup>	(212)	6,971	2,021	2,896	325
+ Depreciation & Non-Cash Expenses	52,631	54,295	54,055	60,448	60,619
+ Changes in Working Capital	2,814	7,605	2,348	17,320	21,052
= "Net Revenue per Indenture"	93,813	92,704	82,978	77,735	125,747
+ Other Available Funds <sup>(5)</sup>	56,868	65,344	66,779	60,951	44,130
Funds Available for Debt Service	150,681	158,048	149,757	138,686	169,877
Debt Service	\$ 65,115	\$ 64,193	\$ 69,585	\$ 69,621	\$ 86,554
Debt Service Coverage	2.31x	2.46x	2.15x	1.99x	1.96x

<sup>(1)</sup> Operating and Investment Income presented in this table differs from the Change in Net Assets presented in the Statement of Revenues, Expenses and Changes in Net Assets in the Audited Financial Statements. See "APPENDIX E—SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS." This table presents Debt Service Coverage as defined under the Indenture and excludes certain elements of nonoperating revenue and expenses included in the Statements of Revenues, Expenses and Changes in Net Assets. An example of an excluded element is Grant Revenue.
 <sup>(2)</sup> Canacity face ware reported as properting revenue for the fiscal years prior to 2008.

<sup>(2)</sup> Capacity fees were reported as nonoperating revenue for the fiscal years prior to 2008.

(3) The Indenture defines "Net Revenue" on a cash basis. See "SECURITY FOR THE BONDS" and "APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

<sup>(4)</sup> Represents adjustments to show investing activities on a cash basis.

Source: SFPUC, Financial Services

<sup>(5)</sup> Under the Indenture, in addition to current year cash flow, the coverage calculation permits the inclusion of certain funds not budgeted to be spent in such twelve months and legally available to pay debt service. See "SECURITY FOR THE BONDS" and "APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

#### Management's Discussion of Fiscal Year 2011 Historical Operating Results

Note: dollar amounts in this section are expressed in thousands.

The Water Enterprise's total revenues for the year of \$337,177 represented an increase of \$56,285 or 20.0% compared to the prior year. Increases included \$25,648 from other non-operating revenues, \$23,018 from charges for services, \$7,460 from interest and investment income, and \$804 from rent and concessions, offset by a decrease of \$645 in other operating revenues from installation services.

Other non-operating revenues increased by \$25,648 or 438.4% primarily due to interest subsidies of \$21,647 from the Internal Revenue Service for Build America bonds issued during the year in connection with the 2010 Series B and Series E. Charges for services increased by \$23,018 or 9.3% due to increased revenues from an average 15% of planned retail rate increase along with an average 15.2% of planned wholesale rate increase, offset by reduced consumption and a decrease in unbilled revenue accrual from wholesale customers. Interest and investment income increased by \$7,460 or 75.9% as a result of higher cash balance from the issuance of revenue bonds and commercial paper during the year.

The Water Enterprise's total expenses increased by \$37,908 or 11.6% to \$364,923 over the prior year, due to increases of \$53,603 in interest expense as a result of the issuance of revenue bonds and commercial paper, \$348 in non-operating expenses mainly for the Water Conservation Rebate Program, offset by a decrease of \$16,043 in operating expenses. The decrease of \$16,043 in operating expenses were due to decreases of \$19,460 in judgments and claims based on actuarial estimate, \$8,127 in non-capitalized project expenses, \$1,266 in services provided by other departments, and \$146 in general and administrative expenses. These decreases were offset by increases of \$6,181 in depreciation, \$3,185 in personal services due to a decrease of \$1,194 in salaries offset by an increase of \$4,379 in retirement and health care costs and contributions, \$2,499 in contractual services primarily for building and structure maintenance, and \$1,091 in materials and supplies for various maintenance projects.

The total transfers out has increased by \$17,341 mainly due to a \$13,638 transfer to the Hetch Hetchy Enterprise for certain up-country water storage and transmission facilities improvements. The Water Enterprise also transferred \$2,643 to the Recreation and Park and the Department of Public Works for the Water Enterprise's landscape and irrigation projects.

See "APPENDIX E—SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS."

#### **PROJECTED OPERATING RESULTS**

The following table presents projected operating results for the Water Enterprise. These projections are based on an analysis of historic trends, adjusted where appropriate for known or anticipated changes in operations. The projections are also based on the assumptions that all retail water rate increases necessary to finance the WSIP will be obtained.

THESE PROJECTIONS, ALL OR SOME OF WHICH MAY OR MAY NOT BE REALIZED, ARE BASED ON THE ISSUANCE OF ADDITIONAL BONDS FOR THE ENTIRE WSIP AS CURRENTLY PROPOSED. CHANGES IN THE CIRCUMSTANCES THAT FORM THE BASES FOR THE ASSUMPTIONS USED IN DEVELOPING THESE PROJECTIONS AS WELL AS UNANTICIPATED EVENTS MAY OCCUR SUBSEQUENT TO THE DATE OF THE OFFICIAL STATEMENT. THEREFORE, ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE PROJECTIONS SHOWN.

#### TABLE 25 PROJECTED REVENUES, OPERATING & MAINTENANCE EXPENSES AND DEBT SERVICE COVERAGE FOR FISCAL YEAR ENDING JUNE 30 (IN THOUSANDS) \*

	2012	2013	2014	2015	2016	2017
REVENUE						
Retail Base Water Sales	\$135,782	\$150,484	\$169,294	\$180,298	\$207,343	\$233,261
Retail Water Sales Rate Adjustments <sup>(1)</sup>	16,973	18,810	11,004	27,045	25,918	29,158
Wholesale Base Water Sales	136,610	184,216	203,053	217,297	252,568	279,020
Wholesale Water Sales Rate Adjustments	46,090	16,103	14,340	35,458	26,610	0
Interest Income	600	2,612	1,262	1,196	1,460	1,562
Other Miscellaneous Income <sup>(2)</sup>	28,535	17,968	18,465	73,976	24,653	25,050
Total Revenues <sup>†</sup>	364,589	390,194	417,419	535,271	538,552	568,050
OPERATING AND MAINTENANCE EXPENSE <sup>(3)</sup>	194,801	206,383	203,283	209,090	215,362	221,823
NET OPERATING REVENUE	169,788	183,811	214,135	326,181	323,189	346,227
plus BEGINNING FUND BALANCE	22,400	35,326	43,372	29,967	48,688	25,652
FUNDS AVAILABLE FOR DEBT SERVICE $^{\dagger(4)}$	192,188	219,137	257,508	356,149	371,878	371,879
DEBT SERVICE	128,300	143,047	178,603	243,658	259,606	284,068
<b>DEBT SERVICE COVERAGE</b> <sup>(5)</sup>	1.50 x	1.53 x	1.44 x	1.46 x	1.43 x	1.31 x

\* Preliminary; subject to change.

Totals may not add due to independent rounding.

<sup>(1)</sup> Income projected from future rate increases to support implementation of WSIP.

(2) Includes the projected Refundable Credits. See "SECURITY FOR THE BONDS." Fiscal Year 2015 includes a projected one-time payment of \$50,000,000 from the Wholesale customers. See "THE WATER ENTERPRISE – Wholesale Deliveries –Allocation of Capital Costs." This decreases future Wholesale revenues by approximately \$4 million annually; this decrease is reflected in Fiscal Year 2017.

(3) Represents Operating and Maintenance Expense net of depreciation and other non-cash items per Indenture. See "SECURITY FOR THE BONDS" and "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

<sup>(4)</sup> Represents Net Revenues under the Indenture. See "SECURITY FOR THE BONDS."

<sup>(5)</sup> Coverage calculated using available fund balance and Net Revenues in accordance with the Indenture. See "SECURITY FOR THE BONDS" and "APPENDIX A—SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

Note: Amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC, Financial Services.

#### **Assumptions Used in Projections**

The assumptions used in the table above are as follows:

**Projected Revenue Assumptions.** The projected revenues are based on projected water sales and the schedules of rates to be effective in each year. On May 5, 2009, the SFPUC adopted schedules of water rates for Retail Customers to be effective in each of the Fiscal Years 2009-10 through 2013-14. The adopted schedules provide for 15% rate increases in Fiscal Year 2009-10 and Fiscal Year 2010-11, 12.5% rate increases in Fiscal Year 2012-13 and a 6.5% rate increase in Fiscal Year 2013-14. See "FINANCIAL OPERATIONS–Retail Water Sales Revenue." The projections assume further retail rate increases of 15% for Fiscal Year 2014-15, 12.5% for Fiscal Year 2015-16, and 12.5% for Fiscal Year 2016-17.

Revenues from sales of water to the Wholesale Customers are calculated in accordance with the Water Supply Agreement.

Water volume sales to the Wholesale Customers and Retail Customers are projected to remain flat over the projection period.

Fiscal Year 2015 revenues include a projected one-time payment of \$50,000,000 from the Wholesale customers. See "THE WATER ENTERPRISE – Wholesale Deliveries –Allocation of Capital Costs."

Interest earnings assume annual yields of 1.2% over the projection period. Other income, including rental income, is assumed to be flat over the projection period.

**Projected Operating Expense Assumptions.** Labor-related expenses, the largest component of Operating and Maintenance Expenses, are projected to remain flat in Fiscal Year 2011-12 and then grow 3% annually thereafter. All other components of Operating and Maintenance Expenses are projected to grow at 3% per year.

**Projected Debt Service Assumptions.** Projected debt service reflects projected Annual Debt Service on Outstanding Bonds and Additional Series of Bonds (net of capitalized interest and debt service reserve fund earnings). Assumptions include:

- cash funded debt service reserve fund equal to one-half of Maximum Annual Debt Service,
- capitalized interest for the May 1, 2012 debt service payments in their entirety,

• capitalized interest for a portion of the debt service payments due on the 2010 Sub-Series A Bonds and the 2010 Sub-Series B Bonds through the period during which the projects funded with the respective sub-series of Bonds were or are being acquired and constructed,

• capitalized interest for a portion of the debt service payments due on the 2010 Series DE Bonds through the period during which the projects funded with the respective sub-series of Bonds are being acquired and constructed,

• capitalized interest for a portion of the debt service payments due on the 2010 Series FG Bonds through the period during which the projects funded with the respective sub-series of Bonds are being acquired and constructed,

• capitalized interest for a portion of the debt service payments due on the 2011 Sub-Series A Bonds and the 2011 Sub-Series B Bonds through the period during which the projects funded with the respective sub-series of Bonds are being acquired and constructed,

• capitalized interest for a portion of the debt service payments due on the 2012 Sub-Series A Bonds through the period during which the projects funded with the respective sub-series of Bonds are being acquired and constructed, plus

• up to three years capitalized interest for future series thereafter.

Beginning in Fiscal Year 2011-12, projected debt service reflects an offset for Refundable Credits to reduce the amount of interest used in calculating Debt Service. See "SECURITY FOR THE BONDS" and "APPENDIX A – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Fifth Supplemental Indenture – Amendments to Indenture – Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service."

Issuances of Additional Series of Bonds are at an assumed 5% borrowing rate. Actual issuance dates, borrowing rates and capitalized interest periods for Additional Series of Bonds are based on current projections and may vary.

Following the issuance of the 2012 Series ABC Bonds, the SFPUC anticipates that it will issue the next Series of Bonds to fund the WSIP in Fiscal Year 2013-14 in an aggregate principal amount of approximately \$553 million. The SFPUC may also issue refunding bonds from time to time in response to market conditions in order to achieve debt service savings. See "FINANCING OF THE WATER SYSTEM IMPROVEMENT PROGRAM."

# **REGULATORY MATTERS**

## General

Public water supply systems in the State, such as the Regional Water System and In-City Distribution System operated by the Water Enterprise, are primarily regulated by the California Department of Public Health ("CaDPH") and, in some limited instances, by the EPA, the California State Water Resources Control Board ("SWRCB"), and California Regional Water Quality Control Boards ("RWQCBs").

Drinking water delivered to Retail Customers must comply with statutory and regulatory water quality standards designed to protect public health and safety. The CaDPH reissued a drinking water supply permit in 2004 prescribing conditions and requirements for the Water Enterprise to operate the Regional Water System. The CaDPH has also issued drinking water supply permits to the In-City Distribution System, the Wholesale Customer public water supply systems and several small water systems owned and operated by the Water Enterprise. In accordance with the drinking water standards and permit requirements, the Water Enterprise operates and maintains water storage, treatment and conveyance facilities, implements watershed management and protection activities, performs inspections, monitors drinking water quality, conducts applied research, and submits monthly and annual compliance reports. The Water Enterprise is currently operating in compliance with all State and federal drinking water regulations and permit requirements. The Regional Water System and the City of San Francisco drinking water supply permits will be updated around 2015 to reflect new facilities and operations.

In addition, public water system discharges to State and federal waters are regulated under general and facility-specific National Pollutant Discharge Elimination System ("NPDES") permits. The San Francisco Bay and Central Valley RWQCBs issued these NPDES permits to the SFPUC which contain numerical effluent limitations, monitoring, reporting, and notification requirements for water discharges from the facilities and pipelines of the Regional Water System. The SFPUC is generally operating and maintaining the water treatment and transmission facilities in compliance with the NPDES permit requirements.

A number of water resource management and regulatory initiatives may affect the availability of water to the Regional Water System in the future. Also, alternate water supplies used by Wholesale Customers of the Water Enterprise may be reduced, increasing the customers' reliance on the Regional Water System. In addition to those raised below, these include the Sacramento-San Joaquin Delta Reform Act of 2009, the federal or California Endangered Species Acts, the SWRCB Bay Delta Proceedings and others. The effects of any of these activities, or of these activities cumulatively, are unknown.

# **Drinking Water Requirements**

*California Department of Public Health*. The Water Enterprise currently operates its systems in compliance with public water supply permits issued by the CaDPH under the California Health and Safety Code. The Water Enterprise has received compliance orders from the CaDPH for noncompliance with some standards.

One such order was issued as a result of events in March 1995 when turbidity limits were exceeded at the Sunol Valley Water Treatment Plant. The CaDPH issued Order No. 02-04-96C-001 (the "Order") requiring, among other things, upgrade of the Sunol Valley Water Treatment Plant and its processing capacity to ensure that water can be adequately treated. The Order limited the treatment capacity of Sunol Valley Water Treatment Plant to either 87 or 118 mgd, depending on raw water quality conditions. After completing the identified improvements except for a treated water storage reservoir, the CaDPH amended the drinking water supply permit for the Regional Water System and increased the Sunol Valley Water Treatment Plant's rated treatment capacity to 160 mgd. With the exception of the new treated water storage reservoir, which is scheduled to be completed in 2013, the projects required by the Order were financed by the 2002 Series A Bonds.

The SFPUC does not currently anticipate any additional orders from the CaDPH. The new treated water storage reservoir and a redundant flocculation/sedimentation basin, which is needed to meet level-of-service goals for sustainable treatment capacity, are included in the WSIP. See "WATER SYSTEM IMPROVEMENT PROGRAM."

*Surface Water Treatment*. The EPA Surface Water Treatment Rule ("SWTR") requires filtration of all surface water supplies unless the water supply can meet very stringent requirements. As discussed above under "WATER FACILITIES—Water Treatment," the high quality of water provided from Hetch Hetchy Reservoir has been sufficient to meet SWTR drinking water requirements without installation and operation of filtration facilities. In 1998, the CaDPH adopted its own version of the SWTR and determined that the Hetch Hetchy source complies with all state drinking water criteria, without installation and operation of filtration facilities could be required in the future if SWTR criteria are not consistently met.

Local water from the Alameda and Peninsula Watersheds requires filtration to meet drinking water quality requirements. The filtered and treated water from the local watersheds is blended with disinfected Hetch Hetchy water, and most customers receive water from a blended source. System water quality, including both raw water and treated water, is continuously monitored and tested to assure that water delivered to customers meets or exceeds federal and State drinking water/public health requirements.

*Long Term 2 Enhanced Surface Water Treatment Rule*. The EPA Long Term 2 Enhanced Surface Water Treatment Rule specifies Cryptosporidium reduction requirements for filtered and unfiltered water systems to improve public health protection through the control of this microbial contaminant. Published in January 2006, the EPA Long Term 2 Enhanced Surface Water Treatment Rule requires large water systems such as the Water Enterprise's Regional Water System to provide Cryptosporidium inactivation treatment by April 1, 2012.

In response to this regulation and consistent with the overall goals of the WSIP, the Water Enterprise has included a project in the WSIP which provides for planning, design and construction of a new advanced disinfection facility that utilizes ultraviolet light technology to inactivate target organisms in the Hetch Hetchy water supply. This project is estimated to cost approximately \$114 million, including construction and project delivery costs, and began operation more than 9 months prior to the compliance date. See "WATER FACILITIES—Water Treatment."

**Stage 2 Disinfectants and Disinfection Byproduct Rule**. The EPA promulgated the Stage 2 Disinfectants and Disinfection Byproducts Rule ("Stage 2 DBPR") to reduce public health risk associated with disinfection byproducts ("DBPs"). Published in January 2006, the Stage 2 DBPR requires water utilities including the Regional Water System and In-City Distribution System to conduct a special study known as Initial Distribution System Evaluation ("IDSE") to identify potentially high DBP locations in their distribution systems. The Stage 2 DBPR also specifies future DBP monitoring requirements based on the IDSE results, and revises the compliance determination method. The monitoring compliance date is April 1, 2012. The Water Enterprise completed the IDSE studies and submitted the reports to CaDPH, and anticipates that compliance with the Stage 2 DBPR has generally been addressed by the continued use of the chloramination treatment process.

*Groundwater Rule.* The EPA promulgated the Groundwater Rule to address waterborne disease and microbial contamination related to groundwater. Published in November 2006, the Groundwater Rule requires that a system putting new groundwater sources in service after November 30, 2009 should conduct assessment source water monitoring if directed by the State. The Groundwater Rule also requires a groundwater system to conduct triggered source water monitoring if it does not provide 4-log virus treatment and the results of bacteriological monitoring are fecal-coliform positive. This rule may affect the treatment and operation of the groundwater projects in the Regional Water System and the In-City Distribution System, depending on the operational management and water quality of these alternate water supplies. New disinfection facilities may be required if blending of these alternate water supplies with the existing treated waters is recommended. New treatment facilities may also be required to reduce certain mineral content of the groundwater to comply with the corresponding drinking water standards.

**Total Coliform Rule and Distribution System Rule**. The EPA is revising the Total Coliform Rule, and is considering the adoption of a new Distribution System Rule in the future to more closely regulate distribution system operations and related facilities. It is too early at this time to identify what new treatment facilities or operational activities will be required to meet these new federal drinking water standards.

*Lead and Copper Rule*. The EPA is considering the possibility of developing long-term revisions to the existing Lead and Copper Rule ("LCR"), which specifies monitoring, reporting, public education, notification, and

treatment requirements for public water systems. The CaDPH has similar regulatory requirements codified in Chapter 17.5 of Title 22, California Code of Regulations.

The SFPUC has proactively addressed lead concerns for several decades, well before the EPA published the LCR in June 1991. In the 1980's, the SFPUC removed all known lead service lines from the In-City Distribution System. In the late 1990's, the SFPUC started distributing non-lead faucets to daycare centers and schools. The distribution program for non-lead faucets was then expanded to the general public. In the 2000's, the SFPUC initiated a program to replace service meters with non-leaded versions in the In-City Distribution System and eliminated large, leaded, compound meters. In 2006, the SFPUC submitted a report to the CaDPH documenting that its existing corrosion control treatment using pH adjustment was optimized. The SFPUC also piloted use of other non-leaded plumbing components and sponsored a new lead-free law, Assembly Bill 1953 ("AB 1953"), that was enacted by the California Legislature in 2006. AB 1953, which requires new lead-free plumbing components containing no more than 0.25% lead that has been in effect since January 1, 2010. The SFPUC's latest LCR monitoring results in 2009 demonstrate continued compliance with the existing LCR.

*Fluoridation*. Assembly Bill 733, signed into law in October 1995, authorizes the CaDPH to require large water systems to fluoridate their public water supply. It also directs the CaDPH to seek funding for fluoridation.

The CaDPH adopted its fluoridation regulations in April 1998. These regulations, as codified in Section 64433 through 64434 of Title 22, California Code of Regulations, apply to large water systems with at least 10,000 service connections. The regulations require that:

- Large systems with existing fluoridation practices continue fluoridating under more stringent regulatory requirements (i.e., concentration, control, monitoring, reporting and notification requirements)
- Large non-fluoridated systems start fluoridating when funding is made available.

The Water Enterprise has been fluoridating its water supply since the early 1950s, and meets all the requirements of these regulations.

The optimal fluoride levels and associated control ranges specified in the fluoridation regulations are based on the annual average of maximum daily air temperatures recorded during the previous five years. In the case of the Regional Water System, the annual average temperature falls in the 58.5° F to 63.8° F range. Because of the large geographic spread of the Regional Water System and its Wholesale Customers, the CaDPH specified an optimal fluoride level of 1.0 mg/L and a control range of 0.8 to 1.5 mg/L for the Regional Water System. The SFPUC is in compliance with the operational and monitoring requirements of the State fluoridation regulations.

*Chloramination*. Chloramine is a disinfectant added to water for public health protection. It is a combination of chlorine and ammonia that is currently considered the best technology for controlling the formation of certain regulated disinfectant by-products ("DBPs"). Chloramine was used as a disinfectant in the entire Regional Water System for ten years between 1935 and 1944 when the Hetch Hetchy water supply was first brought to the San Francisco from the Sierra Nevada Mountains. Many utilities used chloramination at that time, including 34 other drinking water supplies in the State. Chloramination was discontinued in 1944 by the Water Enterprise and many other utilities due to shortages of ammonia during World War II.

The SFPUC started using chloramine as a distribution system disinfectant again in February 2004 to better comply with the Stage 2 DBPR, which require more stringent control of chlorination DBPs. There is a significant amount of on-going research by many agencies worldwide regarding best disinfection practices for control of microorganisms in drinking water and simultaneous minimization of DBPs. The SFPUC continually monitors that research and the latest information on water disinfection practices.

Since 2004, chloramine has been very effective as a distribution system disinfectant in the Regional Water and the In-City Distribution Systems. It has lowered microbial densities (including coliform bacteria, heterotrophic bacteria, *Legionella* bacteria), at the same time minimizing the formation of regulated DBPs. Future adjustments (up or down) of the target chloramine level may occur when operational conditions warrant. A small group of customers believe that various health problems have been caused by chloramine but the SFPUC believes that no scientific proof exists to support these assertions. The SFPUC has worked with local health departments, regulatory agencies, research organizations, professional associations, water quality and health experts, other utilities, and elected officials to address these concerns.

## **Environmental Discharges**

As part of routine operations and maintenance activities, the SFPUC transfers treated water between storage facilities and discharges water to the environment. These transfers and discharges are regulated under the federal Clean Water Act through general and facility-specific National Pollutant Discharge Elimination System ("NPDES") permits issued by the appropriate RWQCB.

The SFPUC currently has several NPDES permits. These permits generally impose discharge limitations, monitoring, reporting, and notification requirements. These permits require the Water Enterprise to control various water quality parameters (such as pH, chlorine residual, turbidity, etc.) and implement best management practices to minimize any adverse environmental effects caused by the discharges from the Regional Water System. Over the past few years, the Water Enterprise has occasionally violated its permit requirements, which has resulted in fines totaling \$151,000. The Water Enterprise is implementing several millions of dollars of capital improvements, as well as operational controls, to more reliably meet permit requirements. See "WATER SYSTEM IMPROVEMENT PROGRAM."

## **Bay-Delta Water Quality Standards**

The Water Enterprise obtains the majority of its water supply from the Hetch Hetchy Reservoir, located on the main branch of the Tuolumne River, which is an upstream tributary to the San Joaquin River and the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (the "Bay-Delta"). In 1995, the SWRCB, which oversees the allocation of water for consumptive and environmental needs, adopted a Water Quality Control Plan (the "Plan") for the Bay-Delta pursuant to State and federal obligations to protect water quality in the Bay-Delta ecosystem. The Plan called for certain flow objectives on the San Joaquin River where it enters the Delta and certain Delta outflows. Because the City is an upstream tributary water right holder, the SWRCB notified 500 parties, including the City, in 1997 that they may be required to implement the Plan by providing water to the Bay-Delta ecosystem.

In 2000, the SWRCB issued an order implementing the Plan. The order requires the United States Bureau of Reclamation and the California Department of Water Resources to provide flows and restrict export pumping to implement the San Joaquin River portion of the Plan until the SWRCB otherwise assigns responsibility to provide flow. The order does not in any way condition the City's rights to divert water from the Tuolumne River, nor does it require the City to release water to implement the Plan.

In 2006, the SWRCB amended the Plan (the "2006 Plan") and identified San Joaquin River flows as an issue of emerging concern because various fish species in the Delta and San Joaquin River basin had not shown significant signs of recovery under the 1995 Plan. In 2008, in light of continued decline in anadromous and pelagic (open water) fish species, the SWRCB adopted a Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The Strategic Workplan calls for review and implementation of the Plan's San Joaquin River flow objectives.

In February 2009, the SWRCB noticed its intent to review and update water quality objectives of the 2006 Plan and the program of implementation, and potential changes to water rights and water quality regulation consistent with the program of implementation. In a letter dated December 19, 2011, the SWRCB stated it would complete its review of the 2006 Plan's San Joaquin River flow objectives by September 2012. Upon amending the 2006 Plan or adopting a different implementation strategy, the SWRCB may require the SFPUC to release water from its system, and, depending upon the quantity, there could be an increase in the degree of rationing required by the City's water customers during times of extended drought. The SFPUC is not presently aware of any other adverse impacts on the Regional Water System should the SWRCB allocate some degree of responsibility to the City during 2012 or after.

## FERC Proceeding to Increase Flows in the Lower Tuolumne River

The Federal Energy Regulatory Commission ("FERC") licenses the Don Pedro Project, owned and operated by the Districts. In July 1996, FERC approved a settlement agreement regarding the Lower Tuolumne River that required increased flows to protect fisheries and riparian resources. The increased flows will be provided by the Districts, who hold the FERC license for the Don Pedro Project.

Pursuant to an existing agreement between the City and the Districts, the City might have been liable to provide a portion of those increased flows. Instead, the City and the Districts entered into a new agreement whereby the Districts provide all flows ordered by FERC to implement the 1996 settlement agreement for the term of the license (through 2016), in exchange for which the City pays to the Districts on a monthly basis an amount aggregating \$3.5 million per year. After ten months of payments an escalation clause applied to keep pace with inflation. Any time after sixty payments, all of which have been made, the City may withdraw from the agreement with the Districts upon one year's notice.

The Don Pedro Project will be subject to re-licensing by FERC in 2016. On February 10, 2011, the Districts filed a notice of intent to file a license application for a new license for the Don Pedro Project. The Districts have also initiated a pre-filing process with stakeholders and agencies on the studies necessary for a new license. License conditions, such as release requirements, could change in a new license. Changed release requirements could affect the availability of Tuolumne River water to the Regional Water System.

### Dam Licensing and Safety Issues

In 1929, the California Legislature enacted legislation providing for supervision over non-federal dams in the State. The statutes place the supervision of the safety of non-federal dams and reservoirs under the jurisdiction of the DSOD. Dams under jurisdiction are artificial barriers, together with appurtenant work, including outlet towers, which are twenty-five feet or more in height or have an impounding capacity of fifty acre-feet or more. Any artificial barrier not in excess of six feet in height, regardless of storage, or that has a capacity not in excess of fifteen acre-feet, regardless of height, is not considered jurisdictional.

The DSOD reviews plans and specifications for the construction of new dams or for the enlargement, alteration, repair or removal of existing dams, under applications, and must grant written approval before the owner can proceed with construction. The DSOD routinely inspects operating dams to assure that they are adequately maintained. The DSOD also conducts investigations of selected dams and directs the owners to additional investigations and detailed safety evaluations when necessary.

The SFPUC has eighteen dams under the jurisdiction of the DSOD. The Crystal Springs Reservoir and the Calaveras Dam are currently the subject of orders by the DSOD.

*Crystal Springs Reservoir System*. An order imposed by DSOD prohibits use of stop logs in the reservoir spillway due to seismic concerns and results in capacity loss at the Crystal Springs Reservoir System. The SFPUC will restore such capacity as part of the WSIP. The recovered capacity at the Crystal Springs Reservoir System will restore storage capacity from 58,300 to 69,400 acre-feet, the historical maximum capacity. Construction on this project began in 2011. It is expected that the recovered storage will be available to the Regional Water System in 2015.

*Calaveras Dam*. Due to seismic stability concerns regarding the Calaveras Dam, the DSOD has restricted the amount of water stored in Calaveras Reservoir to a target maximum of 38,000 acre feet, a reduction in storage capacity of approximately 60%. Under DSOD direction, the SFPUC has committed to an aggressive schedule to alleviate the seismic safety concerns. The replacement dam and reservoir will store 96,800 acre-feet of water, the historical maximum capacity. It is expected that the recovered storage will be available to the Regional Water System by 2015.

## **Hazardous Material Management**

The handling of hazardous materials is subject to a variety of federal and State regulations. The SFPUC complies with current regulations regarding hazardous material safety with regards to both hazardous material disposal and employee safety. While the SFPUC works with regulatory agencies to keep compliant with revisions to hazardous material safety codes, the SFPUC does not currently envision revisions to these codes that would significantly alter the cost of code compliance.

### **Endangered Species**

Various aquatic species (including native fishes) present in the Tuolumne River and Bay Area streams (e.g., Alameda, San Mateo and Pilarcitos Creeks) are either listed or candidates for listing under the State or federal endangered species acts. New listings and future enforcement actions under the acts, or conditions placed in permits to undertake construction for certain WSIP projects, could potentially directly affect water supplies available to the Regional Water System. The SFPUC is working with the responsible State and federal agencies to obtain permits under the acts, which would avoid regulatory uncertainty and ensure water supply reliability for the Regional Water System. In addition, future enforcement actions involving the Bay Delta or Bay Delta tributaries could further affect the availability of supplies to the State Water Project and the Central Valley Project, reducing SFPUC customers' alternate water supplies and increasing their need for additional Regional Water System deliveries.

### **Increased Local Reservoir Water Releases for Fishery Flows**

In order to comply with permit requirements in connection with dam and reservoir improvements to be carried out as part of the WSIP, the SFPUC has implemented schedules of instream flow releases from Crystal Springs Reservoir into San Mateo Creek, and from Calaveras Reservoir into Alameda and Calaveras Creeks, to enhance habitat for native fish. The SFPUC currently anticipates that the flow schedule for San Mateo Creek would be implemented in approximately 2013, and that the flow schedules for Alameda and Calaveras Creeks would be implemented in approximately 2015 (in each case after the related dam improvement projects are completed).

The SFPUC has estimated that implementation of these proposed water releases could result in a potential average annual decrease in available water supply captured from the local watersheds of approximately 7.4 mgd from what was assumed under the adopted WSIP.

# CONSTITUTIONAL, STATUTORY AND CHARTER LIMITATIONS

## **Tax and Spending Limitations**

The taxing powers of public agencies in the State are limited by Article XIIIA of the California Constitution, added by an initiative amendment approved by the voters on June 6, 1978, and commonly known as Proposition 13.

Article XIIIA limits the maximum ad valorem tax on real property to 1% of "full cash value," which is defined as "the County Assessor's valuation of real property as shown on the Fiscal Year 1975-76 tax bill under 'full cash value' or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment." The full cash value may be adjusted annually to reflect inflation at a rate not to exceed 2% per year, or reduction in the consumer price index or comparable local data, or declining property value caused by damage, destruction, or other factors.

The tax rate limitation referred to above does not apply to ad valorem taxes to pay the debt service on any indebtedness approved by the voters before July 1, 1978, or on any bonded indebtedness for the acquisition or improvement of real property approved by two-thirds of the votes cast by the voters voting on the proposition.

Under the terms of Article XIIIA and pursuant to an allocation system created by implementing legislation, each county is required to levy the maximum ad valorem tax permitted by Article XIIIA and to distribute the proceeds to local agencies.

Assessed valuation growth allowed under Article XIIIA (new construction, change of ownership and up to 2% annual value growth) is allocated among the jurisdictions that serve the tax rate area within which the growth occurs. Local agencies and schools share the growth of base revenues from the tax rate area. Each year's growth allocation becomes part of each agency's allocation in the following year. The availability of revenues from tax bases to such entities may be affected by the establishment of redevelopment agencies that, under certain circumstances, may be entitled to such revenues resulting from the upgrading of certain property values.

Under State law, any fee that exceeds the reasonable cost of providing the service for which the fee is charged may be considered a "special tax" that must be authorized by a two-thirds vote of the electorate. Accordingly, if a portion of the SFPUC's water user rates or capacity charges were determined by a court to exceed the reasonable cost of providing service, the SFPUC would not be permitted to continue to collect that portion unless it were authorized to do so by a two-thirds majority of the votes cast in an election to authorize the collection of that portion of the rates or fees. If the SFPUC were unable to obtain such a two-thirds majority vote and were unable to reduce costs, such failure could adversely affect the SFPUC's ability to pay the debt service on the 2012 Series ABC Bonds. However, the reasonable cost of providing water services has been determined by the State Controller to include depreciation and allowance for the cost of capital improvements. In addition, State courts have determined that fees such as capacity charges will not be special taxes if they approximate the reasonable cost of constructing the water system improvements contemplated by the local agency imposing the fee.

The United States Supreme Court has upheld Article XIIIA against a challenge alleging violation of equal protection under the Fourteenth Amendment to the United States Constitution.

### **Proposition 218**

Proposition 218, a State ballot initiative known as the "Right to Vote on Taxes Act," was approved by the voters on November 5, 1996. The initiative added Articles XIIIC and XIIID to the California Constitution, creating additional requirements for the imposition by most local governments of "general taxes," "special taxes," "assessments," "fees," and "charges." Articles XIIIC and XIIID became effective, pursuant to their terms, as of November 6, 1996, although compliance with some of the provisions was deferred until July 1, 1997, and certain of the provisions purport to apply to any tax imposed for general governmental purposes (i.e., "general taxes") imposed, extended or increased on or after January 1, 1995 and prior to November 6, 1996.

Article XIIID imposes substantive and procedural requirements on the imposition, extension or increase of any "fee" or "charge" subject to its provisions. A "fee" or "charge" subject to Article XIIID includes any levy, other than an ad valorem tax, special tax or assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership. Article XIIID prohibits, among other things, the imposition of any proposed fee or charge, and, possibly, the increase of any existing fee or charge, in the event written protests against the proposed fee or charge are presented at a required public hearing on the fee or charge by a majority of owners of the parcels upon which the fee or charge is to be imposed. Except for fees and charges for water, sewer and refuse collection services, the approval of a majority of the property owners subject to the fee or charge, or at the option of the agency, by a two-thirds vote of the electorate residing in the affected area, is required not less than 45 days following the public hearing on any such proposed new or increased fee or charge. In the view of the SFPUC, rates for water usage charged by the SFPUC to the Wholesale Customers are not fees or charges under Article XIIID, although no assurance may be given by the SFPUC that a court would not determine otherwise.

The California Supreme Court decisions in Richmond v. Shasta Community Services District, 32 Cal. 4th 409 (2004) ("Richmond"), and Bighorn-Desert View Water Agency vs. Verjil, 39 Cal. 4th 206 (2006) ("Bighorn") have clarified uncertainty surrounding the applicability of Section 6 of Article XIIID to service fees and charges. In Richmond, the Shasta Community Services District charged a water connection fee, which included a capacity charge for capital improvements to the water system and a fire suppression charge. The Court held that both the capacity charge and the fire suppression charge were not subject to Article XIIID because a water connection fee is not a property-related fee or charge because it 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 XIIID, rejecting, in Bighorn, the water agency's argument that consumption-based water charges are not imposed "as an incident of property decisions of customers as to how much water to use.

The SFPUC provides public notice of proposed water rate increases in accordance with the requirements of Article XIIID through means that include, among others, holding informational presentations at community group meetings, mailings to residential and commercial customers of public hearings on rate increases, and press releases and media campaigns regarding rate increases, followed by public hearings conducted by the SFPUC's Rate Fairness Board and by the SFPUC itself. The SFPUC also develops and adopts retail utility user rates and fees in accordance with the requirements of Article XIIID(6)(b) that limit property-related fees and charges. Article XIIIC extends the people's initiative power to reduce or repeal previously authorized local taxes, assessments, fees and charges. This extension of the initiative power is not limited by the terms of Article XIIIC to fees, taxes, assessment fees and charges imposed after November 6, 1996 and absent other authority could result in retroactive reduction in any existing taxes, assessments, fees or charges. In Bighorn, the Court concluded that under Article XIIIC local voters by initiative may reduce a public agency's water rates and delivery charges. The Court noted, however, that it was not holding that the authorized initiative power is free of all limitations, stating that it was not determining whether the electorate's initiative power is subject to the public agency's statutory obligation to set water service charges at a level that will "pay the operating expenses of the agency, ... provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due."

The courts have not fully interpreted the provisions of Proposition 218. The SFPUC is unable to predict how courts will further interpret Article XIIIC and Article XIIID, and what, if any, further implementing legislation will be enacted. Under the Bighorn case, City voters could adopt an initiative measure that reduces or repeals the SFPUC's water rates and charges, though it is not clear whether (and courts have not decided whether) any such reduction or repeal by initiative would be enforceable in a situation in which such rates and charges are pledged to the repayment of bonded indebtedness. There can be no assurance that the courts will not further interpret, or the voters will not amend, Article XIIIC and Article XIIID to limit the ability of the SFPUC to impose, levy, charge and collect increased fees and charges for the Water Enterprise, or to call into question water rate increases previously adopted by the SFPUC. No assurance may be given that Articles XIIIC and XIIID will not have a material adverse impact on Revenues.

# **Charter Limitations**

The Charter requires that bonds (such as the Bonds) secured by revenues, other than refunding bonds, may be issued only with the assent of a majority of voters. However, under the Charter amendments enacted by the voters in November 2002 (Proposition E), the SFPUC may issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the SFPUC (and subject to the further conditions contained in Proposition E). See "OBLIGATIONS PAYABLE FROM REVENUES— Authority for Issuance of Revenue Bonds and Other Obligations Payable from Revenues."

In June 1998 the electorate of the City approved Proposition H which, subject to certain exceptions, including a limited exception to raise rates to pay debt service on voter-approved debt, froze the SFPUC's water rates through July 1, 2006. The SFPUC can give no assurance that the electorate will not seek in the future to freeze or limit rate increases.

## Initiative, Referendum and Charter Amendments

*General.* Article XIIIA and Articles XIIIC and XIIID of the California Constitution were adopted pursuant to the State's constitutional initiative process. From time to time other initiative measures could be adopted by State voters, or by voters of the City, placing additional limitations on the ability of the SFPUC to increase revenues.

**Proposition 26.** Proposition 26 was recently approved by the electorate at the November 2, 2010 election. Proposition imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes. The initiative was designed to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges.

Proposition 26 expressly excludes "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 [State/local government] of providing the service or product to the payor" and "assessments and property-related fees imposed in accordance with the provisions of Article XIII D." The SFPUC believes that the initiative is not intended to and would not apply to fees for utility services charged by the SFPUC. The SFPUC, however, is unable to predict whether Proposition 26 will be interpreted by the courts to apply to the provision of utility services by local governments such as the SFPUC.

*Future Charter Amendments.* The voters could adopt additional Charter amendments in the future that could limit the ability of the SFPUC to issue debt, affect the operation of the Water Enterprise, limit the ability of the SFPUC to enact rate increases, or implement other changes affecting the SFPUC and the Water Enterprise.

# LITIGATION

The SFPUC is not aware of any litigation pending or threatened questioning the political existence of the City or the SFPUC or contesting the SFPUC's power to fix water rates and charges, or in any way questioning or affecting:

- (i) the proceedings under which the 2012 Series ABC Bonds are to be issued,
- (ii) the validity of any provision of the 2012 Series ABC Bonds or the Indenture,
- (iii) the pledge of Revenues by the SFPUC under the Indenture, or
- (iv) the titles to office of the present members of the Board of Supervisors and the Commission.

In 2011, the SFPUC executed a comprehensive settlement agreement for seven litigation matters with a single opposing party arising from five construction projects, at a net cost to the SFPUC of approximately \$14 million, after offsets from contract retention and insurance proceeds. The SFPUC currently intends to use a portion of the proceeds of the 2012 Sub-Series B Bonds to reimburse a portion of the cost of this settlement.

There are a number of suits and claims pending against the City and the SFPUC, which may include personal injury, wrongful death and other suits and claims against which the City may self-insure. The aggregate amount of the self-insured liabilities of the City and the SFPUC which may result from such suits and claims will not, in the opinion of the City Attorney, materially impair the ability of the SFPUC to pay principal of or interest on the 2012 Series ABC Bonds as they become due. There is no litigation pending, with service of process having been accomplished, against the City or the SFPUC which if determined adversely to the City or the SFPUC would, in the opinion of the City Attorney, materially impair the ability of the SFPUC to pay principal of and interest on the 2012 Series ABC Bonds as they become due.

## TAX MATTERS

# General

In the opinion of Sidley Austin LLP, San Francisco, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel to the SFPUC, based on existing statutes, regulations, rulings and judicial decisions, and assuming compliance by the SFPUC with certain covenants in the Indenture and other documents pertaining to the 2012 Series ABC Bonds and requirements of the Internal Revenue Code of 1986, as amended (the "Code"), regarding the use, expenditure and investment of proceeds of the 2012 Series ABC Bonds and the timely payment of certain investment earnings to the United States, interest on the 2012 Series ABC Bonds is not includable in the gross income of the owners of the 2012 Series ABC Bonds for federal income tax purposes. Failure to comply with such covenants and requirements may cause interest on the 2012 Series ABC Bonds to be included in gross income retroactively to the date of issuance of the 2012 Series ABC Bonds.

In the further opinion of Co-Bond Counsel, interest on the 2012 Series ABC Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals and corporations. Interest on the 2012 Series ABC Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may therefore affect a corporation's alternative minimum tax liability.

Ownership of, or the receipt of interest on, tax-exempt obligations may result in collateral tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, certain foreign corporations doing business in the United States, certain S corporations with excess passive income, individual recipients of Social Security or Railroad Retirement benefits, taxpayers that may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations and taxpayers who may be eligible for the earned income tax credit. Co-Bond Counsel express no opinion with respect to any collateral tax consequences and, accordingly, prospective purchasers of the 2012 Series ABC Bonds should consult their tax advisors as to the applicability of any collateral tax consequences.

Certain requirements and procedures contained or referred to in the Indenture or in other documents pertaining to the 2012 Series ABC Bonds may be changed, and certain actions may be taken or not taken, under the circumstances and subject to the terms and conditions set forth in such documents, upon the advice or with the approving opinion of counsel nationally recognized in the area of tax-exempt obligations. Co-Bond Counsel express no opinion as to the effect of any change to any document pertaining to the 2012 Series ABC Bonds or of any action taken or not taken where such change is made or action is taken or not taken without the approval of Sidley Austin LLP and Curls Bartling P.C., or in reliance upon the advice of counsel other than Sidley Austin LLP and Curls Bartling P.C., with respect to the exclusion from gross income of the interest on the 2012 Series ABC Bonds for federal income tax purposes.

# **Original Issue Discount**

The initial public offering price of certain of the 2012 Series ABC Bonds (the "Discount 2012 Series ABC Bonds") is less than the principal amount of the Discount 2012 Series ABC Bonds. The difference between the principal amount of a Discount 2012 Series ABC Bond and its initial public offering price is original issue discount. Original issue discount on a Discount 2012 Series ABC Bond accrues over the term of such Discount 2012 Series ABC Bond at a constant interest rate. To the extent it has accrued, original issue discount on a Discount 2012 Series ABC Bond is treated as interest excludable from gross income for federal income tax purposes under the conditions and limitations described above. The amount of original issue discount that accrues on a Discount 2012 Series ABC Bond in each year is not an item of tax preference for purposes of calculating federal alternative minimum taxable income and may therefore affect a corporation's alternative minimum tax liability. Additionally, such accrued original issue discount is taken into account in determining the distribution requirements of certain regulated investment companies. Consequently, owners of Discount 2012 Series ABC Bonds should be aware that the accrual of original issue discount in each year may result in an alternative minimum tax liability, additional distribution requirements or other collateral federal income tax consequences although the owner may not have received cash in such year.

The accrual of original issue discount on a Discount 2012 Series ABC Bond will increase the owner's adjusted basis in such Discount 2012 Series ABC Bond. This will affect the amount of taxable gain or loss realized by the owner of the Discount 2012 Series ABC Bond upon the redemption, prepayment, sale or other disposition of such Discount 2012 Series ABC Bond. The effect of the accrual of original issue discount on the federal income tax consequences of a redemption, prepayment, sale or other disposition of a Discount 2012 Series ABC Bond that is not purchased at the initial public offering price may be determined according to rules that differ from those described above. Owners of Discount 2012 Series ABC Bonds should consult their tax advisors with respect to the precise determination for federal income tax purposes of the amount of original issue discount that properly accrues with respect to the Discount 2012 Series ABC Bonds, other federal income tax consequences of owning and disposing of the Discount 2012 Series ABC Bonds.

## **Original Issue Premium**

The excess, if any, of the tax adjusted basis of 2012 Series ABC Bonds purchased as part of the initial public offering to a purchaser (other than a purchaser who holds such Tax-Exempt Bonds as inventory, stock in trade or for sale to customers in the ordinary course of business) over the amount payable at maturity is "bond premium." Bond premium is amortized over the term of such 2012 Series ABC Bonds for federal income tax purposes (or, in the case of a bond with bond premium callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on such bond). Owners of 2012 Series ABC Bonds with bond premium are required to decrease their adjusted basis in such 2012 Series ABC Bonds by the amount of amortizable bond premium attributable to each taxable year such 2012 Series ABC Bonds are held. The amortizable bond premium on such 2012 Series ABC Bonds attributable to a taxable year is not deductible for federal income tax purposes; however, bond premium is treated as an offset to the interest received on such 2012 Series ABC Bonds. Owners of such 2012 Series ABC Bonds should consult their tax advisors with respect to the determination for federal income tax purposes of the treatment of bond premium upon sale or other disposition of such 2012 Series ABC Bonds and with respect to the state and local tax consequences of owning and disposing of such 2012 Series ABC Bonds.

### **Information Reporting and Backup Withholding**

Interest paid on the 2012 Series ABC Bonds will be subject to information reporting in a manner similar to interest paid on taxable obligations. Although such reporting requirement does not, in and of itself, affect the excludability of such interest from gross income for federal income tax purposes, such reporting requirement causes the payment of interest on the 2012 Series ABC Bonds to be subject to backup withholding if such interest is paid to beneficial owners who (a) are not "exempt recipients," and (b) either fail to provide certain identifying information (such as the beneficial owner's taxpayer identification number) in the required manner or have been identified by the Internal Revenue Service (the "IRS") as having failed to report all interest and dividends required to be shown on their income tax returns. Generally, individuals are not exempt recipients, whereas corporations and certain other

entities are exempt recipients. Amounts withheld under the backup withholding rules from a payment to a beneficial owner are allowed as a refund or credit against such beneficial owner's federal income tax liability so long as the required information is furnished to the IRS.

### **State Tax Exemption**

In the further opinion of Co-Bond Counsel, interest on the 2012 Series ABC Bond is exempt from personal income taxes imposed by the State of California.

# **Future Developments**

Future or pending legislative proposals, if enacted, regulations, rulings or court decisions may cause interest on the 2012 Series ABC Bonds to be subject, directly or indirectly, to federal income taxation or to State or local income taxation, or may otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. Legislation or regulatory actions and future or pending proposals may also affect the economic value of the federal or State tax exemption or the market value of the 2012 Series ABC Bonds. Prospective purchasers of the 2012 Series ABC Bonds should consult their tax advisors regarding any future, pending or proposed federal or State tax legislation, regulations, rulings or litigation as to which Co-Bond Counsel expresses no opinion.

For example, based on a proposal by the President, the Senate Majority Leader introduced a bill, S. 1549 (the "Proposed Legislation"), which, if enacted, would subject interest on bonds that is otherwise excludable from gross income for federal income tax purposes, including interest on the 2012 Series ABC Bonds, to a tax payable by certain bondholders that are individuals, estates or trusts with adjusted gross income in excess of thresholds specified in the Proposed Legislation in tax years beginning after December 31, 2012. The Proposed Legislation would also provide special rules for such bondholders that are also subject to the alternative minimum tax. It is unclear if the Proposed Legislation will be enacted, whether in its current or an amended form, or if other legislation that would subject interest on the 2012 Series ABC Bonds to a tax or cause interest on the 2012 Series ABC Bonds to be included in the computation of a tax, will be introduced or enacted. Prospective purchasers should consult their tax advisors as to the effect of the Proposed Legislation, if enacted, in its current form or as it may be amended, or such other legislation on their individual situations.

# **CERTAIN LEGAL MATTERS**

Certain legal matters incident to the authorization, sale and delivery of the 2012 Series ABC Bonds are subject to the approval of Sidley Austin LLP, San Francisco, California, and Curls Bartling P.C., Oakland, California, Co-Bond Counsel to the SFPUC. Certain legal matters are being passed upon for the SFPUC by the City Attorney and by Jones Hall, A Professional Law Corporation, San Francisco, California, Disclosure Counsel. Co-Bond Counsel and Disclosure Counsel will receive compensation that is contingent upon the sale and delivery of the 2012 Series ABC Bonds.

The form of approving opinion of Co-Bond Counsel is set forth in APPENDIX F, and will be available at the time of delivery of the 2012 Series ABC Bonds. Co-Bond Counsel is not passing upon and undertakes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

Jones Hall, A Professional Law Corporation, has served as Disclosure Counsel to the SFPUC and in such capacity has advised the SFPUC with respect to the requirements of applicable securities laws and participated with responsible SFPUC officials and staff in conferences and meetings where information contained in this Official Statement was reviewed for accuracy and completeness. Disclosure Counsel is not responsible for the accuracy or completeness of the information presented in this Official Statement and has not undertaken to independently verify any of such information. Rather, the SFPUC is solely responsible for the accuracy and completeness of the information contained in this Official Statement. Upon the issuance of the 2012 Series ABC Bonds, Jones Hall will deliver a letter to the SFPUC concerning certain matters with respect to the Official Statement. No purchaser or holder of the 2012 Series ABC Bonds, or other person or party other than the SFPUC, will be entitled to rely on such letter or on the fact that Jones Hall has acted as Disclosure Counsel to the SFPUC.

## RATINGS

Moody's Investors Service ("Moody's") has assigned its municipal bond rating of "Aa3" to the 2012 Series ABC Bonds, and Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business ("S&P"), has assigned its municipal bond rating of "AA-" to the 2012 Series ABC Bonds.

The ratings assigned by Moody's and Standard & Poor's express only the views of the respective rating agencies. The explanation of the significance of these ratings, and any outlook associated with these ratings, may be obtained from Moody's and Standard & Poor's, respectively. Each rating agency generally bases its rating on its own investigations, studies, and assumptions. The SFPUC has provided certain additional information and materials to the rating agencies (some of which does not appear in this Official Statement).

There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2012 Series ABC Bonds. The SFPUC undertakes no responsibility to maintain its current ratings on the 2012 Series ABC Bonds or to oppose any such downward revision, suspension or withdrawal.

# UNDERWRITING

The 2012 Sub-Series A Bonds are being purchased by \_\_\_\_\_\_\_ (the "2012 Sub-Series A Underwriter") as winner of a competitive bid conducted on \_\_\_\_\_\_, 2012. The 2012 Sub-Series A Underwriter has agreed to purchase the 2012 Sub-Series A Bonds from the SFPUC at a purchase price of \$\_\_\_\_\_\_\_ (consisting of \$\_\_\_\_\_\_\_ aggregate principal amount of the 2012 Sub-Series A Bonds, plus net original issue premium of \$\_\_\_\_\_\_\_, less an underwriter's discount of \$\_\_\_\_\_\_\_, less an underwriter will be obligated to purchase all of the 2012 Sub-Series A Bonds if any are purchased, the obligation to make such purchase being subject to certain terms and conditions to be satisfied by the SFPUC.

The 2012 Sub-Series B Bonds are being purchased by \_\_\_\_\_\_ (the "2012 Sub-Series B Underwriter") as winner of a competitive bid conducted on \_\_\_\_\_\_, 2012. The 2012 Sub-Series B Underwriter has agreed to purchase the 2012 Sub-Series B Bonds from the SFPUC at a purchase price of \$\_\_\_\_\_\_\_ (consisting of \$\_\_\_\_\_\_\_ aggregate principal amount of the 2012 Sub-Series B Bonds, plus net original issue premium of \$\_\_\_\_\_\_\_, less an underwriter's discount of \$\_\_\_\_\_\_\_, less an underwriter's discount of purchase all of the 2012 Sub-Series B Bonds if any are purchased, the obligation to make such purchase being subject to certain terms and conditions to be satisfied by the SFPUC.

The 2012 Sub-Series C Bonds are being purchased by \_\_\_\_\_\_\_ (the "2012 Sub-Series C Underwriter") as winner of a competitive bid conducted on \_\_\_\_\_\_\_, 2012. The 2012 Sub-Series C Underwriter has agreed to purchase the 2012 Sub-Series C Bonds from the SFPUC at a purchase price of \$\_\_\_\_\_\_\_\_ (consisting of \$\_\_\_\_\_\_\_\_, aggregate principal amount of the 2012 Sub-Series C Bonds, plus net original issue premium of \$\_\_\_\_\_\_\_, less an underwriter's discount of \$\_\_\_\_\_\_\_, less an underwriter's discount of \$\_\_\_\_\_\_\_\_, less all of the 2012 Sub-Series C Bonds if any are purchased, the obligation to make such purchase being subject to certain terms and conditions to be satisfied by the SFPUC.

The Underwriters have certified the reoffering prices or yields set forth on the inside cover of this Official Statement. The SFPUC takes no responsibility for the accuracy of these prices or yields. The Underwriters may offer and sell the 2012 Series ABC Bonds to certain dealers and others at prices lower than the offering prices stated on the inside cover page. The offering prices may be changed from time to time by the Underwriters.

# FINANCIAL STATEMENTS

Attached as APPENDIX E are the audited financial statements of the Water Enterprise (the "Financial Statements") for Fiscal Years 2009-10 and 2010-11, prepared by the SFPUC and audited by KPMG LLP, independent certified public accountants, San Francisco, California (the "Auditor"). The financial statements are included for convenience.

The SFPUC has not requested nor did the SFPUC obtain permission from the Auditor to include the audited financial statements as an Appendix to this Official Statement. Accordingly, the Auditor has made no representation in connection with inclusion of the audits herein that there has been no material change in the financial condition of the SFPUC since the most recent audit was concluded. The Auditor has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. The Auditor also has not performed any procedures relating to this Official Statement.

# **CONTINUING DISCLOSURE**

The SFPUC has covenanted for the benefit of the owners and beneficial owners of the 2012 Series ABC Bonds, under a Continuing Disclosure Certificate dated as of the Closing Date, to provide certain financial information and operating data (an "Annual Report") not later than nine months following the end of its Fiscal Year (presently June 30), beginning on March 31, 2013, with the report for Fiscal Year 2011-12, and to promptly provide notices of the occurrence of certain enumerated events set forth in the Continuing Disclosure Certificate ("Listed Events").

The SFPUC will file the Annual Report and any notice of Listed Events as described in the Continuing Disclosure Certificate. The specific nature of the information to be contained in the Annual Report or the notices of Listed Events is set forth in the Continuing Disclosure Certificate. These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the "Rule"). The form of the Continuing Disclosure Certificate is attached to this Official Statement as APPENDIX G.

The SFPUC has never failed to comply in all material respects with its prior continuing disclosure undertakings under the Rule.

### **CO-FINANCIAL ADVISORS**

Montague DeRose and Associates, LLC, Walnut Creek, California, and Backstrom McCarley Berry & Co., LLC, San Francisco, California (the "Co-Financial Advisors"), have served as Co-Financial Advisors to the SFPUC in connection with the structuring and delivery of the 2012 Series ABC Bonds. The Co-Financial Advisors are not obligated to undertake, and have not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Co-Financial Advisors will receive compensation that is contingent upon the sale and delivery of the 2012 Series ABC Bonds.

# **VERIFICATION OF MATHEMATICAL ACCURACY**

Upon delivery of the 2012 Sub-Series C Bonds, Causey, Demgen & Moore, Inc., Certified Public Accountants, Denver, Colorado, will deliver a report on the mathematical accuracy of certain computations, contained in schedules provided to them on behalf of the SFPUC, relating to (a) the sufficiency of the anticipated receipts from the cash deposited in the Escrow Fund to prepay the Refunded Prior Bonds in full, and (b) the "yield" on the investments deposited in the Escrow Fund and on the Refunded Prior Bonds considered by Bond Counsel in connection with the opinion rendered by such firm that the Refunded Prior Bonds are not "arbitrage bonds" within the meaning of Section 148 of the Internal Revenue Code of 1986, as amended.

# **MISCELLANEOUS**

References made in this Official Statement to certain documents and reports are brief summaries thereof that do not purport to be complete or definitive, and reference is made to such documents and reports for full and complete statements of the contents thereof.

The appendices to this Official Statement are integral parts of this Official Statement. Investors must read the entire Official Statement, including the appendices, to obtain information essential to making an informed investment decision.

# **APPROVAL AND EXECUTION**

This Official Statement has been duly approved, executed and delivered by the SFPUC.

PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO

By:\_\_\_\_\_

Edward M. Harrington General Manager (THIS PAGE INTENTIONALLY LEFT BLANK)

## **APPENDIX A**

## SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

This Appendix contains summaries of certain provisions of the Indenture, which are in addition and complementary to the summaries found in the Official Statement under the captions "INTRODUCTION" "THE 2012 SERIES ABC BONDS" and "SECURITY FOR THE BONDS." The following summaries are qualified in their entirety by reference to the complete Indenture, a copy of which can be obtained from the Commission.

# DEFINITIONS

#### Accreted Value

The term "Accreted Value" means, with respect to any Capital Appreciation Bond, the principal amount thereof plus the interest accrued thereon from its date, compounded at the approximate interest rate thereof on each May 1 and November 1. The Accreted Values at any date to which reference is made will be the amounts set forth in the Accreted Value Table.

#### Accreted Value Table

The term "Accreted Value Table" means, with respect to any Capital Appreciation Bonds, the corresponding table attached as an Exhibit to the Indenture or to a Supplemental Indenture pursuant to which Additional Bonds constituting Capital Appreciation Bonds are issued.

#### Additional Bonds

The term "Additional Bonds" means bonds, notes or other obligations of the Commission payable from Revenues and ranking on a parity with the Bonds and authorized to be issued under and pursuant to the Indenture.

#### Authorized Officer, Responsible Officer

The terms "authorized officer" and "responsible officer" of the Trustee mean and include the chairman of the board of directors, the president, every vice president, every assistant vice president, the cashier, every assistant cashier, every trust officer, and every officer and assistant officer of the Trustee, other than those specifically above mentioned, to whom any trust matter is referred because of his knowledge of, and familiarity with, a particular subject.

### Balloon Indebtedness

The term "Balloon Indebtedness" means a Series of Bonds 25% or more of the principal of which matures on the same date and which amount is not required by the documents governing such Bonds to be amortized by payment or redemption prior to such date. For purposes of this definition, an optional or mandatory tender of Bonds for purchase as described within the definition of Tender Indebtedness will not be treated as a maturity. If any Series of Bonds consists partially of Variable Rate Indebtedness and partially of indebtedness bearing interest at a fixed rate, the portion constituting Variable Rate Indebtedness and the portion bearing interest at a fixed rate will be treated as separate issues for purposes of determining whether any such indebtedness constitutes Balloon Indebtedness.

# Board of Supervisors

The term "Board of Supervisors" means the Board of Supervisors of the City from time to time or any other governing board of the City hereafter provided for pursuant to law.

## Bond Obligation

The term "Bond Obligation" means, as of any given date of calculation, (1) with respect to any Outstanding Current Interest Bond, the principal amount of such Bond, and (2) with respect to any Outstanding Capital Appreciation Bond, the Accreted Value thereof as of the May 1 or November 1 next preceding such date of calculation (unless such date of calculation is a May 1 or November 1 in which case as of such date).

### Bondowner, Owner

The term "Bondowner" or "Owner" means any person who is the registered owner of any Outstanding Bond, or, if such Outstanding Bond has a maturity of one year or less and is issued in bearer form, the bearer of such Bond.

## Bond Reserve Fund

The term "Bond Reserve Fund" means the fund by that name established under the Indenture.

### Bond Reserve Fund Policy

The term "Bond Reserve Fund Policy" means a policy of insurance or surety bond issued by a Municipal Bond Insurer, obligations insured by which have a rating by Moody's and S&P which is the highest rating then issued by said rating agency, or a Letter of Credit issued by a Qualified Bank, to satisfy all or a portion of the Required Reserve.

## Bonds, Capital Appreciation Bonds, Current Interest Bonds, Serial Bonds, Term Bonds

The term "Bonds" means the San Francisco Water Revenue Bonds authorized by, and at any time Outstanding pursuant to, the Indenture or any Supplemental Indenture, including any Additional Bonds authorized by, and at any time Outstanding pursuant to, the Indenture and any Supplemental Indenture, and includes bonds, notes or other evidences of indebtedness payable from Revenues on a parity with the Outstanding Bonds.

The term "Current Interest Bonds" means all or any portion of a Series of Bonds designated as Current Interest Bonds and which pay interest at least semiannually to the Owners thereof excluding the first payment of interest thereon.

The term "Capital Appreciation Bonds" means all or any portion of a Series of Bonds designated as Capital Appreciation Bonds and on which interest is compounded and paid at maturity or on prior redemption.

The term "Serial Bonds" means all or any portion of a Series of Bonds designated as Serial Bonds and for which no Minimum Sinking Fund Account Payments are provided.

The term "Term Bonds" means all or any portion of a Series of Bonds designated as Term Bonds and which are payable at or before their specified maturity date or dates from Minimum Sinking Fund Account Payments established for that purpose and calculated to retire such Bonds on or before their specified maturity date or dates.

#### Build America Bonds

The term "Build America Bonds" means any bonds or other obligations issued as Build America Bonds under Section 54AA of the Code, or under any other provisions of the Code that creates, in the determination of the Commission, a substantially similar direct-pay subsidy program that provides comparable security for the Owners of the Bonds.

## Business Day

The term "Business Day" means any day other than (1) a Saturday, Sunday or day upon which commercial banks in San Francisco, California, or New York, New York are authorized or required to be closed and (2) for purposes of payments and other actions relating 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 Qualified Bank at which demands for payment under the Letter of Credit are to be presented are authorized to be closed.

## Certificate of the Commission

The term "Certificate of the Commission" means an instrument in writing signed by the President or by the General Manager or by any other officer of the Commission or of the City duly authorized by the Commission for that purpose, and by the Secretary. Any such instrument and supporting opinions or representations, if any, may, but need not, be combined in a single instrument with any other instrument, opinion or representation, and the two or more so combined will be read and construed as a single instrument. If and to the extent required by the provisions of the Indenture, each Certificate of the Commission will include the statements provided for in the Indenture.

## Charter

The term "Charter" means (i) with respect to the Series of 1987 Bonds and the 1991 Series A Bonds, (as such terms are defined in the preambles to the Indenture), the Charter of the City in effect at the time of issuance of such Series of Bonds, as thereafter amended, including by the Charter of the City as it now exists, and (ii) with respect to the 2001 Series A Bonds, the 2002 Series A Bonds, the 2002 Refunding Series B Bonds, the 2006 Series A Bonds, the 2006 Refunding Series C Bonds, the 2009 Series A Bonds, the 2010 Series ABC Bonds, the 2010 Series DE Bonds, the 2010 Series FG Bonds, the 2011 Series ABCD Bonds, the 2012 Series ABC Bonds and any Additional Bonds, the Charter of the City as it now exists or as it may hereafter be amended, and any new or successor Charter.

## <u>City</u>

The term "City" means the existing political subdivision known as the City and County of San Francisco, in the State of California, as the same is organized and existing under and by virtue of the Constitution and laws of the State of California and the Charter and any public body hereafter created which will be a successor thereto.

### Code

The term "Code" means the Internal Revenue Code of 1986, as amended.

### Commission

The term "Commission" means the Public Utilities Commission of the City duly constituted under the Charter, and all commissions, agencies or public bodies hereafter created which succeed to or take over the powers and duties of the Commission with respect to the Enterprise.

## Consulting Engineers

The term "Consulting Engineers" means any engineer or firm of engineers retained by the Commission having a wide and favorable reputation for skill and experience in evaluating the construction and operation of public utilities, including public water supply, storage and distribution systems, or in other revenue producing publicly owned enterprises, to perform the acts and carry out the duties provided for such consulting engineers in the Indenture.

## Controller

The term "Controller" means the Controller of the City from time to time and includes any deputy acting for the Controller.

### Credit Provider

The term "Credit Provider" refers to a Municipal Bond Insurer that has issued an outstanding policy of municipal bond insurance or a Qualified Bank that is the issuer of an outstanding Letter of Credit which, in each case, secures payment of principal of, and interest on, or tender price of, all or a portion of a Series of Bonds; provided that this term will not refer to a Reserve Provider.

#### Effective Date

The term "Effective Date" means each date on which one or more of the respective provisions of the Fifth Supplemental Indenture becomes effective, being such time as the written consents of the Owners of a majority in aggregate amount of the Bond Obligation of the Bonds then Outstanding and of each Credit Provider have been filed with the Trustee, and the other requirements contained in Section entitled "Modification or Amendment of the Indenture" of the Indenture have been satisfied.

### Eighth Supplemental Indenture

The term "Eighth Supplemental Indenture" means the Eighth Supplemental Indenture, dated as of August 1, 2010, by and between the Commission and the Trustee.

### Eighteenth Supplemental Indenture

The term "Eighteenth Supplemental Indenture" means the Eighteenth Supplemental Indenture, dated as of June 1, 2012, by and between the Commission and the Trustee.

# Eleventh Supplemental Indenture

The term "Eleventh Supplemental Indenture" means the Eleventh Supplemental Indenture, dated as of December 1, 2010, by and between the Commission and the Trustee.

#### Enterprise

The term "Enterprise" means the whole and each and every part of the municipal water supply, storage and distribution system of the Commission, as located partially within and partially without the City, including all of said presently existing municipal water system of the City and all additions, betterments, and extensions to said water system or any part thereof thereafter made, but excluding any water supply, storage or distribution facilities under the jurisdiction of the Hetch Hetchy Project, a department of the City under the jurisdiction of the Commission.

#### Escrow Agreement

The term "Escrow Agreement" means the Escrow Agreement, dated as of June 1, 2012, by and between the Commission and U.S. Bank National Association, as escrow agent

## Event of Default

The term "Event of Default" means an event of that name described in the Indenture.

## Federal Securities

The term "Federal Securities" means United States treasury notes, bonds, bills or certificates of indebtedness, or obligations for which the faith and credit of the United States of America are pledged for the payment of principal and interest (including obligations issued or held in book-entry form and securities which represent an undivided interest in such direct obligations), and also any securities now or hereafter authorized, both the principal of and interest on which is guaranteed directly by the full faith and credit of the United States of America, and including interest strips held in book-entry form by the Federal Reserve Bank of New York of bonds issued by the Resolution Funding Corporation. For the 2002 Series A Bonds, the 2002 Refunding Series B Bonds and all Additional Bonds issued subsequent to the 2002 Series A Bonds and the 2002 Refunding Series B Bonds, the term "Federal Securities" will also include bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following federal agencies and provided such obligations are backed by the full faith and credit of the United States of America (stripped securities are only permitted if they have been stripped by the agency itself): (i) direct obligations or fully guaranteed certificates of beneficial ownership of the U.S. Export-Import Bank; (ii) certificates of beneficial ownership of the Rural Economic Community Development Administration (formerly the Farmers Home Administration); (iii) obligations of the Federal Financing Bank; (iv) debentures of the Federal Housing Administration; (v) participation certificates of the General Services Administration; (vi) guaranteed Title XI financings of the U.S. Maritime Administration; and (vii) project notes, local authority bonds, new communities debentures and U.S. public housing notes and bonds of the U.S. Department of Housing and Urban Development.

### Fifteenth Supplemental Indenture

The term "Fifteenth Supplemental Indenture" means the Fifteenth Supplemental Indenture, dated as of July 1, 2011, by and between the Commission and the Trustee.

# Fifth Supplemental Indenture

The term "Fifth Supplemental Indenture" means the Fifth Supplemental Indenture, dated as of June 1, 2010, by and between the Commission and the Trustee.

#### Financial Newspaper or Journal

The term "Financial Newspaper or Journal" means *The Wall Street Journal* or *The Bond Buyer*, or any other newspaper or journal publishing financial news and selected by the Trustee, whose decision will be final and conclusive, printed in the English language, customarily published on each business day and circulated in San Francisco, California.

#### First Supplemental Indenture

The term "First Supplemental Indenture" means the First Supplemental Indenture, dated as of March 1, 2006, by and between the Commission and the Trustee.

### Fiscal Year

The term "Fiscal Year" means the period beginning on July 1 of each year and ending on the next succeeding June 30, or such other fiscal year as may be adopted by the Commission for its general accounting purposes or the then current accounting period of the City if the Commission has no separate accounting period.

#### Fourteenth Supplemental Indenture

The term "Fourteenth Supplemental Indenture" means the Fourteenth Supplemental Indenture, dated as of July 1, 2011, by and between the Commission and the Trustee.

## Fourth Supplemental Indenture

The term "Fourth Supplemental Indenture" means the Fourth Supplemental Indenture, dated as of September 1, 2009, by and between the Commission and the Trustee.

### General Manager

The term "General Manager" means the manager of utilities appointed by the Commission from time to time pursuant to the Charter or any other applicable provision of law.

## Improvement Fund

The term "Improvement Fund" means the fund by that name established pursuant to the Indenture.

### Indenture

The term "Indenture" means the Amended and Restated Indenture, dated as of August 1, 2002, by and between the Commission and the Trustee, as originally executed or as it may from time to time be supplemented or amended by any Supplemental Indenture delivered pursuant to the provisions of the Indenture.

## Independent Certified Public Accountant

The term "Independent Certified Public Accountant" means any certified public accountant or firm of such accountants appointed and paid by the City or the Commission, and who, or each of whom –

- (i) is in fact independent and not under domination of the City or the Commission;
- (ii) does not have any substantial interest, direct or indirect, with the City or the Commission;

(iii) is not connected with the City or the Commission as an officer or employee of the City or the Commission, but who may be regularly retained to make annual or other audits of the books of or reports to the City or the Commission.

## Information Services

and

The term "Information Services" means: Financial Information, Inc.'s "Daily Called Bond Service," 30 Montgomery Street, 10th Floor, Jersey City, New Jersey 07302, Attention: Editor; Mergent/FIS, 5250 77 Center Drive, Suite 150, Charlotte, North Carolina, 28217, Attn: Called Bond Dept.; and Kenny S&P, 55 Water Street, 45th Floor, New York, New York 10041, Attention: Notification Department; or, in accordance with then-current guidelines of the Securities and Exchange Commission, such other addresses or such other services providing information with respect to called bonds, or no such services, as the Commission may designate in a Written Request of the Commission delivered to the Trustee.

#### Law

The term "Law" means the Charter, the San Francisco Administrative Code, and all laws of the State of California supplemental thereto, including the Revenue Bond Law of 1941 to the extent made applicable by the Charter or by the San Francisco Administrative Code. Whenever reference is made in the Indenture to the Law, reference is made to the Law as in force on the date of the Indenture or any Supplemental Indenture, unless the context otherwise requires.

## Legal Investments

The term "Legal Investments" means bonds, notes, certificates of indebtedness, bills, acceptances or other securities in which funds of the Commission may now or hereafter be legally invested as provided by the law in effect at the time of such investment.

## Letter of Credit

The term "Letter of Credit" means an irrevocable and unconditional letter of credit, a standby purchase agreement, a line of credit or other similar credit arrangement issued by a Qualified Bank to secure payment of Balloon Indebtedness, Variable Rate Indebtedness, Tender Indebtedness or a Series of Bonds or to satisfy all or a portion of the Required Reserve.

## Letter of Credit Agreement

The term "Letter of Credit Agreement" means an agreement between the Commission and a Qualified Bank pursuant to which the Qualified Bank agrees to issue a Letter of Credit and which sets forth the repayment obligation of the Commission to the Qualified Bank on account of any payment under the Letter of Credit.

#### Letter of Instructions

The term "Letter of Instructions" means the letter of instructions, dated as of November 1, 1987, from the Commission to the Trustee, as fiscal agent for the Series of 1985 Bonds.

#### Letter of Representations

The term "Letter of Representations" means the letter or letters of representation of the Commission delivered to and accepted by The Depository Trust Company setting forth the basis on which The Depository Trust Company serves as depository for the Bonds, as originally executed or as it may be supplemented or revised or replaced by a letter to a substitute depository.

# Maximum Annual Debt Service, Annual Debt Service, Debt Service, Average Annual Debt Service

The term "Maximum Annual Debt Service" means, at any point in time, with respect to Bonds then Outstanding, the maximum amount of principal and interest becoming due in the then current or any future Fiscal Year, calculated by the Commission as provided in this definition. For purposes of calculating Maximum Annual Debt Service, the following assumptions are to be used to calculate the principal and interest becoming due in any Fiscal Year:

(i) in determining the principal amount due in each year, payment will (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 Minimum Sinking Fund Account Payments or any scheduled redemption or payment of Bonds on the basis of Accreted Value, and for such purpose, the redemption payment or payment of Accreted Value will be deemed a principal payment and interest that is compounded and paid as Accreted Value will be deemed due on the scheduled redemption or payment date of such Capital Appreciation Bond;

(ii) if any of the Outstanding Series of Bonds constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness or if Bonds then proposed to be issued would constitute Balloon Indebtedness or Balloon Indebtedness and Variable Rate Indebtedness, then, for purposes of determining Maximum Annual Debt Service, such amounts as constitute Balloon Indebtedness will be treated as if the principal amount of such Bonds were to be amortized from the date of their original issuance in substantially equal annual installments of principal and interest over a term of 25 years; the interest rate used for such computation will be the rate quoted in *The Bond Buyer –25 Revenue Bond Index* for the last week of the month preceding the date of calculation, as published in *The Bond Buyer*, or if that

index is no longer published, another similar index selected by the Commission, or if the Commission fails to select a replacement index, an interest rate equal to 80% of the yield for outstanding United States Treasury bonds having an equivalent maturity as the Bonds on the date of issuance, or if there are no such Treasury bonds having equivalent maturities, 80% of the lowest prevailing prime rate of any of the five largest commercial banks in the United States ranked by assets;

(iii) if any Outstanding Bonds constitute Tender Indebtedness or if Bonds then proposed to be issued would constitute Tender Indebtedness, then for purposes of determining the amounts of principal and interest due in any Fiscal Year on such Bonds, the options or obligations of the owners of such Bonds to tender the same for purchase or payment prior to their stated maturity or maturities will be treated as a principal maturity occurring on the first date on which owners of such Bonds may or are required to tender such Bonds except that any such option or obligation to tender Bonds will be ignored and not treated as a principal maturity, if (1) such Bonds are rated in one of the two highest long-term rating categories (without reference to gradations such as "plus" or "minus") by Moody's and by S&P or such Bonds are rated in the highest short-term, note or commercial paper rating categories by Moody's and by S&P and (2) the obligation, if any, the Commission may have under a Letter of Credit Agreement with respect to such Bonds, other than its obligations on such Bonds, will either be subordinated to the obligation of the Commission on the Bonds or be incurred under the conditions and meeting the tests for the issuance of Additional Bonds set forth in the Indenture;

(iv) if any Outstanding Bonds constitute Variable Rate Indebtedness, the interest rate on such Bonds will be assumed to be 110% of the greater of (a) the daily average interest rate on such Bonds during the 12 months ending with the month preceding the date of calculation, or such shorter period that such Bonds have been Outstanding, or (b) the rate of interest on such Bonds on the date of calculation;

(v) if Bonds proposed to be issued will be Variable Rate Indebtedness, then such Bonds will be assumed to bear interest at the rate quoted in *The Bond Buyer –25 Revenue Bond Index* for the last week of the month preceding the date of sale of such additional Bonds, as published in *The Bond Buyer*, or if that index is no longer published, another similar index selected by the Commission, or if the Commission fails to select a replacement index, an interest rate equal to 80% of the yield for outstanding United States Treasury bonds having an equivalent maturity as the additional Bonds proposed to be issued, or if there are no such Treasury bonds having equivalent maturities, 80% of the lowest prevailing prime rate of the five largest commercial banks in the United States ranked by assets:

(vi) if moneys or Federal Securities or general obligation bonds of the State of California have been deposited with and are held by the Trustee or another fiduciary to be used to pay principal and/or interest on specified Bonds, then the principal and/or interest to be paid from such moneys or Federal Securities or general obligation bonds of the State of California or from the earnings thereon will be disregarded and not included in calculating Maximum Annual Debt Service.

The term "Annual Debt Service" means the sum of such principal and interest as computed for the twelve-month period ending June 30 to which reference is made.

The term "Debt Service" means the sum of all such principal and interest.

The term "Average Annual Debt Service" means total Debt Service, divided by the number of twelve-month periods ending on June 30 (including any fractional periods) remaining until the last maturity date of any Outstanding Bond.

For the purpose of calculating Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service, in determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that were issued as Build America Bonds, such amount will be reduced by an amount equal to the Refundable Credits the Commission is scheduled to receive during each such twelve-month period ending June 30. If the amount of Refundable Credits received by the Commission for any Series of Bonds that were issued as Build America Bonds is reduced or not received during any twelve-month period ending June 30, the Commission will calculate the amount of interest coming due for the subsequent twelve-month period ending

June 30 without deducting an amount equal to the Refundable Credits for the purpose of calculating Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service until the receipt of such Refundable Credits resumes and all prior deficiencies are cured.

## Mayor

The term "Mayor" means the Mayor of the City from time to time.

## Minimum Sinking Fund Account Payments

The term "Minimum Sinking Fund Account Payments" means the aggregate amounts required by the Indenture and any subsequent Supplemental Indenture or Supplemental Indentures to be deposited in Sinking Fund Accounts for the payment of Term Bonds.

## Moody's

The term "Moody's" means Moody's Investors Service, Inc., 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 will be dissolved or liquidated or will no longer perform the functions of a securities rating agency, then the term "Moody's" will be deemed to refer to any other nationally recognized securities rating agency selected by the Commission and approved by the Trustee.

### Municipal Bond Insurer

The term "Municipal Bond Insurer" means any insurance company or companies which has or have issued a policy of municipal bond insurance insuring payment of the principal of and interest on any of the Bonds of any Series or a Bond Reserve Fund Policy and are so designated as such in the Indenture or a Supplemental Indenture.

## Net Revenues

The term "Net Revenues" means all of the Revenues (but not including interest on investment of funds required to be deposited in said funds or investment earnings required to be deposited in the Improvement Fund) less all Operation and Maintenance Costs of the Enterprise (but not including such Operation and Maintenance Costs as are scheduled to be paid by the Commission from moneys other than Revenues, such moneys to be clearly available for such purpose).

## 1985 Resolution

The term "1985 Resolution" means Resolution No. 85-0413, adopted October 1, 1985 by the Commission, as supplemented and amended, which resolution authorized the issuance of the Series of 1985 Bonds.

## 1991 Series A Bonds

The term "1991 Series A Bonds" has the meaning set forth in the preambles to the Indenture.

#### 1996 Series A Bonds

The term "1996 Series A Bonds" has the meaning set forth in the preambles to the Indenture.

## Ninth Supplemental Indenture

The term "Ninth Supplemental Indenture" means the Ninth Supplemental Indenture, dated as of August 1, 2010, by and between the Commission and the Trustee.

## Notes

The term "Notes" means Commercial Paper Notes (Water Series) issued by the Commission.

### Operation and Maintenance Costs of the Enterprise

The term "Operation and Maintenance Costs of the Enterprise" means the reasonable and necessary costs of operating and maintaining the Enterprise, calculated on sound accounting principles, including (among other things) salaries and wages, fees for services, costs of materials, supplies and fuel, reasonable expenses of management, legal fees, accounting fees, repairs and other expenses necessary to maintain and preserve the Enterprise in good repair and working order, and reasonable amounts for administration, overhead, insurance, taxes (if any), other similar costs, and the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Commission may establish or the Board of Supervisors may require with respect to employees of the Commission, as provided in the Charter, but excluding in all cases (i) depreciation and obsolescence charges or reserves therefor, (ii) amortization of intangibles or other bookkeeping entries of a similar nature, (iii) costs of capital additions, replacements, betterments, extensions or improvements to the Enterprise, which under generally accepted accounting principles are chargeable to a capital account or to a reserve for depreciation, and (iv) charges for the payment of principal and interest on any general obligation bonds, revenue bonds or other indebtedness heretofore or hereafter issued for Enterprise purposes.

## Opinion of Counsel

The term "Opinion of Counsel" means a written opinion of counsel (who may be counsel for the City or the Commission) retained by the Commission and who is acceptable to the Trustee. If and to the extent required by the provisions of the Indenture, each Opinion of Counsel will include the statements provided for in the Indenture.

### Outstanding

The term "Outstanding," when used as of any particular time with reference to Bonds, means (subject to the provisions of the Indenture) all Bonds theretofore executed, issued and delivered by the Commission under the Indenture except -

(1) Bonds theretofore cancelled by the Trustee or surrendered to the Trustee for cancellation;

(2) Bonds for the payment or redemption of which funds or securities in the necessary amount (as set forth in the Indenture) will have theretofore been deposited with a fiduciary (whether upon or prior to the maturity or redemption date of such Bonds), provided that, if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption will have been given as in the Indenture provided or provision satisfactory to the Trustee will have been made for the giving of such notice; and

(3) Bonds in lieu of or in substitution for which other Bonds have been executed, issued and delivered by the Commission pursuant to the Indenture.

For purposes of this definition and within the meaning of the Indenture, Bonds the principal of or interest on which has been paid by a Municipal Bond Insurer will not be deemed paid by or on behalf of the Commission, will not be defeased and will remain Outstanding under the Indenture until paid by the Commission.

### Payment Date

The term "Payment Date" means any interest, or interest and principal, payment date on which payment of the principal of or interest on the Bonds is due or on which any Term Bonds are required to be redeemed from any Minimum Sinking Fund Account Payments.

## Permitted Investments

The term "Permitted Investments" means any of the following:

(1) United States Treasury notes, bonds, bills, or certificates of indebtedness, or obligations for which the faith and credit of the United States of America are pledged for the payment of principal and interest (including obligations issued or held in book-entry form on the books of the Department of the Treasury of the United States of America and securities which represent an undivided interest in such direct obligations), and also any securities now or hereafter authorized, both the principal of and interest on which is guaranteed directly by the full faith and credit of the United States of America;

(2) Bonds, consolidated bonds, collateral trust debentures, consolidated debentures or other obligations issued by federal land banks or federal intermediate credit banks established under the Federal Farm Loan Act, as amended; debentures and consolidated debentures issued by the Central Bank for Cooperatives and banks for cooperatives established under the Farm Credit Act of 1933, as amended; bonds or debentures of the Federal Home Loan Bank Board established under the Federal Home Loan Bank Act and bonds of any federal home loan bank established under said act; bonds, debentures, participation certificates or other obligations of the Government National Mortgage Association or the Federal National Mortgage Association established under the National Housing Act, as amended; and also any securities now or hereafter authorized, both the principal of and interest on which is guaranteed indirectly by the full faith and credit of the United States of America;

(3) Time certificates of deposit or negotiable certificates of deposit issued by a state or nationally chartered bank or trust company, including the Trustee, or a state or federal savings and loan association, provided that such certificates of deposit will be (i) continuously and fully insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation or (ii) issued by 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 combined capital and surplus of at least \$100,000,000, and such certificates will have maturities of six months or less, or (iii) continuously and fully secured by such securities as are described in clauses (1) or (2) above, which securities will have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit;

(4) Bankers' acceptances which are issued by a bank or trust company organized under the laws of any state of the United States or any national banking association (including the Trustee) rated "A" or higher by Moody's and S&P; provided, that such banker's acceptances may not exceed 270 days' maturity;

(5) 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) 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 described in clauses (1) or (2) above, provided the underlying securities are required by the repurchase agreement to be held by any such bank, trust company or primary dealer having a combined capital and surplus of at least \$100,000,000 and being independent of the issuer of such repurchase agreement, and provided the securities are continuously maintained at a market value of not less than the amount so invested;

(6) Commercial paper of "prime" quality of the highest ranking or of the highest letter and numerical rating as provided by Moody's and S&P, which commercial paper is limited to issuing corporations that are organized and operating within the United States of America and that have total assets in excess of five hundred million (\$500,000,000) and that have an "A" or higher rating for the issuer's debentures, other than commercial paper, as provided by Moody's and S&P; provided that purchases of eligible commercial paper may not exceed one hundred eighty (180) days' maturity nor represent more than ten percent (10%) of the outstanding commercial paper of an issuer corporation;

(7) Bonds, notes, warrants or other evidence of indebtedness of any of the states of the United States or of any political subdivision or public agency thereof which are rated in one of the two highest short-term or long-term rating categories by Moody's and S&P;

(8) Any investment agreement with (i) 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) or government bond dealer reporting to, trading with and recognized as a primary dealer by, the Federal Reserve Bank of New York, having a combined capital and surplus of at least \$100,000,000 or (ii) any corporation, limited liability company or other entity that is organized and operating within the United States of America and that has total assets in excess of \$500,000,000 and (A) at the time the investment agreement is entered into, has an "A" or higher rating for its debt, other than commercial paper, as provided by Moody's and S&P, or (B) at the time the investment agreement are guaranteed by any entity with an "A" or higher rating for its debt, other than commercial strength, as provided by Moody's and S&P; and

(9) Government money market portfolios or money market funds restricted to obligations issued or guaranteed as to payment of principal and interest by the full faith and credit of the United States of America, which portfolios, unless held by the Trustee for 5 business days or less, have a rating at least equal to the lowest then existing rating on the Bonds given by S&P and Moody's.

## Policy Costs

The term "Policy Costs" means the amounts owing to a Reserve Provider, including the principal amount of any draw on a Bond Reserve Fund Policy, interest thereon and reasonable expenses incurred by the Reserve Provider in enforcing payment of Policy Costs, as more fully set forth in the agreement pursuant to which such Bond Reserve Fund Policy is issued.

# President

The term "President" means the President of the Commission from time to time.

## Project

The term "Project" means any additions, enlargements, betterments, extensions and other improvements to or benefiting, and the equipping of, the Enterprise, including, without limitation, the acquisition of land therefor.

### Project Fund

The term "Project Fund" means each fund by the name established within the Improvement Fund.

# Proportionate Basis

The term "Proportionate Basis" when used with respect to the redemption of Bonds, means that the amount of Bonds of each maturity to be redeemed will be determined as nearly as practicable by multiplying the total amount of funds available for redemption by the ratio which the amount of Bond Obligation of Bonds of such maturity bears to the amount of all Bond Obligation of Bonds to be redeemed, provided that if the amount available for redemption of Bonds of any maturity is insufficient to redeem a multiple of \$5,000 principal amount or Accreted Value payable at maturity, such amount will be applied to the redemption of the highest possible integral multiple (if any) of \$5,000 principal amount or Accreted Value payable at maturity. For purposes of the foregoing, Term Bonds will be deemed to mature in the years and in the amounts of the Minimum Sinking Fund Account Payments and Capital Appreciation Bonds and Current Interest Bonds maturing or subject to Minimum Sinking Fund Account Payments in the same year will be treated as separate maturities. When used with respect to the payment or purchase of Bonds, "Proportionate Basis" will have the same meaning set forth above except that "pay" or

"purchase" will be substituted for "redeem" or "redemption" and "paid" or "purchased" will be substituted for "redeemed."

## Proposition A of 2002

The term "Proposition A of 2002" means a measure approved by a majority of voters voting thereon at a duly called and held revenue bond election on November 5, 2002, authorizing the issuance by the Commission of its revenue bonds or other forms of revenue financing in a principal amount not to exceed \$1,628,000,000 to finance the acquisition and construction of improvements to the Enterprise.

# Proposition E of 2002

The term "Proposition E of 2002" means a measure approved by a majority of voters voting thereon at a duly called and held revenue bond election on November 5, 2002 authorizing the issuance by the Commission of its revenue bonds or other forms of revenue financing for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the Commission

### Qualified Bank

The term "Qualified Bank" means a state or national bank or trust company or savings and loan association or a foreign bank with a domestic branch or agency which is organized and in good standing under the laws of the United States or any state thereof or any foreign country, which has a capital and surplus of \$25,000,000 or more and which has a short term debt rating of the highest ranking or of the highest letter and numerical rating as provided by Moody's or by S&P.

### Qualified Independent Consultant

The term "Qualified Independent Consultant" means a person or a firm who or which engages in the business of advising the management of public agencies concerning the operation and financing of public utilities, including public water supply, storage and distribution systems, and also including advice and consultation generally concerning the use and operation of public utilities, including public water supply, storage and distribution systems, and also including advice and distribution systems, and which person or firm, by reason of his or its knowledge and experience, has acquired a reputation as a recognized consultant. Such Qualified Independent Consultant may include a person or firm rendering professional engineering or accounting services in addition to his or its occupation as a public utility consultant and may include any person or firm regularly employed by the City or the Commission as a consultant to the City or the Commission.

## Rebate Certificate

The term "Rebate Certificate" means the Rebate Certificate or similar tax certificate delivered or to be delivered by the Commission at the time of issuance and delivery of a Series of Bonds, as the same may be amended or supplemented in accordance with its terms.

#### Rebate Fund

The term "Rebate Fund" means the fund established and so designated for a Series of Bonds.

## Refundable Credits

The term "Refundable Credits" means (a) with respect to a Series of Bonds issued as Build America Bonds under Section 54AA of the Code, the amounts which are payable by the Federal government under Section 6431 of the Code, which the Commission has elected to receive under Section 54AA(g)(1) of the Code, and (b) with respect to a Series of Bonds issued as Build America Bonds under any other provisions of the Code that creates, in the determination of the Commission, a substantially similar direct-pay subsidy program, the amounts which are

payable by the Federal government under the applicable provisions of the Code, which the Commission has elected to receive under the applicable provisions of the Code.

### Required Reserve

The term "Required Reserve" means, with respect to a Series of Bonds, the aggregate amount which is equal to the sum of fifty percent (50%) of the Maximum Annual Debt Service on such Series of Bonds then Outstanding; provided, however, that such Required Reserve or a portion thereof may be provided by one or more Bond Reserve Fund Policies.

Following the Effective Date of the Fifth Supplemental Indenture, the definition of "Required Reserve" will be amended to read as follows:

## The term "Required Reserve" means,

(1) with respect to a Series of Bonds issued prior to the Effective Date, the aggregate amount which is equal to the sum of fifty percent (50%) of the Maximum Annual Debt Service on such Series of Bonds then Outstanding; provided, however, that such Required Reserve or a portion thereof may be provided by one or more Bond Reserve Fund Policies; provided further that in no event will the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit.

(2) with respect to a Series of Bonds issued on or after the Effective Date, as of any date of calculation, the amount, if any, required to be deposited into a Reserve Account for that Series of Bonds, as defined in and provided by the Supplemental Indenture pursuant to which such Series of Bonds is issued; provided, however, that in no event will the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit.

# Reserve Account

The term "Reserve Account" means each account established in the Bond Reserve Fund with respect to each Series of Bonds issued under the Indenture.

### Reserve Provider

The term "Reserve Provider" means the issuer of a Bond Reserve Fund Policy.

#### Revenue Fund

The term "Revenue Fund" means the fund by that name established pursuant to the Indenture.

## Revenues

The term "Revenues" means all gross revenues of the Enterprise, including all charges received for and all other income and receipts derived by the Commission or the City from the operation of the Enterprise, or arising from the Enterprise, including connection and installation charges, but excluding -

(1) any money received by or for the account of the City or the Commission from the levy or collection of taxes,

(2) moneys received from the State of California and the United States of America and required to be deposited in restricted funds,

(3) refundable deposits made to establish credit,

(4) advances and contributions made to the Commission or the City to be applied to construction,

(5) moneys required to be paid to the State of California and the United States of America pursuant to agreements with the City or the Commission,

(6) moneys received from insurance proceeds or the sale of or upon the taking by or under the threat of eminent domain of all or any part of the Enterprise (which moneys will be received and disposed of pursuant to the Indenture),

(7) proceeds from Bonds issued by the Commission or proceeds from loans obtained by the Commission,

(8) moneys or securities received by the City or the Commission as gifts or grants, the use of which is restricted by the donor or grantor,

(9) sewer service fees or charges, and

(10) any surcharge imposed by or upon the direction of any joint powers agency or other governmental entity, other than the Commission, the City or any department or agency of the City, whether or not collected by the Commission, the City or any department or agency of the City, for the purpose of financing improvements to the facilities comprising the Enterprise.

The term "Revenues" also includes (i) all interest, profits or other income derived from the deposit or investment of any moneys in any fund or account established under the Indenture (excluding any Rebate Fund and any escrow fund pledged for the payment of defeased bonds) or in any fund or account of the Enterprise and legally available to pay Debt Service on the Bonds, and (ii) any other moneys, proceeds and other amounts that the Commission determines should be "Revenues" under the Indenture.

### Second Supplemental Indenture

The term "Second Supplemental Indenture" means the Second Supplemental Indenture, dated as of August 1, 2006, by and between the Commission and the Trustee.

## Secretary

The term "Secretary" means the Secretary of the Commission from time to time.

# Securities Depositories

The term "Securities Depositories" means The Depository Trust Company, 711 Stewart Avenue, Garden City, New York 11530, Fax-(516) 227-4039 or 4190; or, in accordance with then-current guidelines of the Securities and Exchange Commission, to such other addresses or such other securities depositories, or no such depositories, as the Commission may designate in a Written Request of the Commission delivered to the Trustee.

# Series

The term "Series" means any series of Bonds executed, authenticated and delivered pursuant to the Indenture and identified as a separate Series of Bonds, including any Additional Bonds issued pursuant to a Supplemental Indenture and the Indenture.

## Series of 1985 Bonds

The term "Series of 1985 Bonds" has the meaning set forth in the preambles to the Indenture.

### Series of 1987 Bonds

The term "Series of 1987 Bonds" has the meaning set forth in the preambles to the Indenture.

### Seventh Supplemental Indenture

The term "Seventh Supplemental Indenture" means the Seventh Supplemental Indenture, dated as of June 1, 2010, by and between the Commission and the Trustee.

# Seventeenth Supplemental Indenture

The term "Seventeenth Supplemental Indenture" means the Seventeenth Supplemental Indenture, dated as of June 1, 2012, by and between the Commission and the Trustee.

### Sinking Fund Accounts

The term "Sinking Fund Accounts" means any special account or accounts established by the Indenture or any Supplemental Indenture or Indentures in the Principal Fund for the payment of Term Bonds.

# Sixth Supplemental Indenture

The term "Sixth Supplemental Indenture" means the Sixth Supplemental Indenture, dated as of June 1, 2010, by and between the Commission and the Trustee.

## Sixteenth Supplemental Indenture

The term "Sixteenth Supplemental Indenture" means the Sixteenth Supplemental Indenture, dated as of June 1, 2012, by and between the Commission and the Trustee.

# <u>S&P</u>

The term "S&P" means Standard & Poor's Ratings Services, 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 is dissolved or liquidated or will no longer performs the functions of a securities rating agency, then the term "S&P" will be deemed to refer to any other nationally recognized securities rating agency selected by the Commission and approved by the Trustee.

#### Supplemental Indenture

The term "Supplemental Indenture" means any indenture or resolution amendatory of or supplemental to the Indenture; but only if and to the extent that such Supplemental Indenture is specifically authorized under the Indenture.

## Tender Indebtedness

The term "Tender Indebtedness" means any Bonds or portions of Bonds a feature of which is an option, on the part of the Bondowners, or an obligation, under the terms of such Bonds, to tender all or a portion of such Bonds to the Commission, the Trustee or other fiduciary or agent for payment or purchase and requiring that such Bonds or portions of Bonds be purchased if properly presented.

## Tenth Supplemental Indenture

The term "Tenth Supplemental Indenture" means the Tenth Supplemental Indenture, dated as of December 1, 2010, by and between the Commission and the Trustee.

# Third Supplemental Indenture

The term "Third Supplemental Indenture" means the Third Supplemental Indenture, dated as of August 1, 2009, by and between the Commission and the Trustee.

# Thirteenth Supplemental Indenture

The term "Thirteenth Supplemental Indenture" means the Thirteenth Supplemental Indenture, dated as of July 1, 2011, by and between the Commission and the Trustee.

# Treasurer

The term "Treasurer" means the Treasurer of the City and includes any deputy acting for the Treasurer.

### Trustee

The term "Trustee" means U.S. Bank National Association, acting as an independent trustee with the duties and powers provided in the Indenture, its successors and assigns, and any other corporation or association which may at any time be substituted in its place, as provided in the Indenture.

## Twelfth Supplemental Indenture

The term "Twelfth Supplemental Indenture" means the Twelfth Supplemental Indenture, dated as of July 1, 2011, by and between the Commission and the Trustee.

### 2001 Series A Bonds

The term "2001 Series A Bonds" has the meaning set forth in the preamble to the Indenture.

## 2002 Series A Bonds

The term "2002 Series A Bonds" has the meaning set forth in the preamble to the Indenture.

#### 2011 Series ABCD Bonds

The term "2011 Series ABCD Bonds" has the meaning set forth in the Twelfth, Thirteenth, Fourteenth and Fifteenth Supplemental Indentures.

#### 2012 Series ABC Bonds

The term "2012 Series ABC Bonds" has the meaning set forth in the Sixteenth, Seventeenth and Eighteenth Supplemental Indentures.

#### 2012 Series ABC Reserve Account

The term "2012 Series ABC Reserve Account" has the meaning set forth in the Twelfth Supplemental Indenture.

## 2012 Sub-Series A Project

The term "2012 Sub-Series A Project" means the reconstruction, replacement, expansion and repair of or improvements to the water facilities of the Enterprise with proceeds of the 2012 Sub-Series A Bonds.

# 2012 Sub-Series A Rebate Fund

The term "2012 Series A Rebate Fund" has the meaning set forth in the Sixteenth Supplemental Indenture.

## 2012 Sub-Series B Rebate Fund

The term "2012 Series B Rebate Fund" has the meaning set forth in the Seventeenth Supplemental Indenture.

# 2012 Sub-Series C Rebate Fund

The term "2012 Series C Rebate Fund" has the meaning set forth in the Eighteenth Supplemental Indenture.

#### Variable Rate Indebtedness

The term "Variable Rate Indebtedness" means any portion of 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.

## Written Request of the Commission, Written Requisition of the Commission, Written Statement of the Commission

The terms "Written Request of the Commission," "Written Requisition of the Commission" and "Written Statement of the Commission" mean, respectively, a written request, requisition or statement signed by or on behalf of the Commission by the President or the General Manager or the Secretary or by any person (whether or not an officer of the Commission) who is specifically authorized by resolution of the Commission (which resolution will be provided to the Trustee) to sign or execute such a document on its behalf.

### **USE OF DEPOSITORY**

(a) The 2012 Series ABC Bonds will be initially registered in the name of "Cede & Co.," as nominee of The Depository Trust Company, New York, New York (the "Depository Trust Company"). Registered ownership of the 2012 Series ABC Bonds, or any portions thereof, may not thereafter be transferred except:

(i) to any successor of The Depository Trust Company or its nominee, or of any substitute depository designated pursuant to clause (ii) of this subsection (a) (a "Substitute Depository"); provided that any successor of The Depository Trust Company or Substitute Depository will be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) to any Substitute Depository not objected to by the Trustee, upon (1) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (2) a determination by the Commission that The Depository Trust Company (or its successor) is no longer able to carry out its functions as depository; provided that any such Substitute Depository will be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) to any person as provided below, upon (1) the resignation of The Depository Trust Company or its successor (or any Substitute Depository or its successor) from its functions as depository, or (2) a determination by the Commission to remove The Depository Trust Company or its successor (or Substitute Depository or its successor) from its functions as depository. (b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection (a) above, upon receipt of all Outstanding 2012 Series ABC Bonds by the Trustee, together with a Written Request of the Commission to the Trustee designating the Substitute Depository, one new bond for each sub-series of 2012 Series ABC Bond (as the case may be), which the Commission will prepare or cause to be prepared, will be executed and delivered for each maturity of such sub-series of 2012 Series ABC Bonds then Outstanding, registered in the name of such successor or such Substitute Depository, or their nominees, as the case may be, all as specified in such Written Request of the Commission. In the case of any transfer pursuant to clause (iii) of subsection (a) above, upon receipt of all Outstanding 2012 Series ABC Bonds by the Trustee, together with a Written Request of the Commission to the Trustee, new bonds for each sub-series of 2012 Series ABC Bonds, which the Commission will prepare or cause to be prepared in definitive form, will be executed and delivered in such denominations and registered in the names of such persons as are requested in such Written Request of the Commission, subject to the limitations of the Indenture, provided that the Trustee will not be required to deliver such new bonds for each sub-series of 2012 Series ABC Bonds are request from the Commission.

(c) In the case of a partial redemption or an advance refunding of any 2012 Series ABC Bonds evidencing a portion of the principal maturing in a particular year, The Depository Trust Company or its successor (or any Substitute Depository or its successor) will make an appropriate notation on such 2012 Series ABC Bonds indicating the date and amounts of such reduction in principal, in form acceptable to the Trustee. The Trustee will not be liable for such depository's failure to make such notations or errors in making such notations.

(d) The Commission and the Trustee will be entitled to treat the person in whose name any 2012 Series ABC Bonds is registered as the Owner thereof for all purposes of the Indenture and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the Commission; and the Commission and the Trustee will not have responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with any beneficial owners of the 2012 Series ABC Bonds. Neither the Commission nor the Trustee will have any responsibility or obligation, legal or otherwise, to any such beneficial owners or to any other party, including The Depository Trust Company or its successor (or Substitute Depository or its successor), except to the Owner of any 2012 Series ABC Bonds, and the Trustee may rely conclusively on its records as to the identity of the Owners of the 2012 Series ABC Bonds.

(e) Notwithstanding any other provisions of the Indenture and so long as all Outstanding 2012 Series ABC Bonds are registered in the name of Cede & Co. or its registered assigns, the Commission and the Trustee will cooperate with Cede & Co., as sole registered Bondowner, and its registered assigns in effecting payment of the principal of and redemption premium, if any, and interest on the 2012 Series ABC Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made available on the date they are due all in accordance with the letter of representations delivered by the Commission and the Trustee to The Depository Trust Company with respect to the 2012 Series ABC Bonds, the provisions of which the Trustee may rely upon to implement the foregoing procedures notwithstanding any inconsistent provisions set out in the Indenture.

# **BOND PROCEEDS FUNDS; ADDITIONAL SERIES OF BONDS**

**Improvement Fund**. The Commission covenanted and agreed, upon the discharge of the 1985 Resolution, to maintain under the Indenture the separate fund known as the "1985 Water Revenue Bond Improvement Fund" (the "Improvement Fund") created pursuant to the 1985 Resolution. The Treasurer holds the amounts on deposit in the Improvement Fund. The Improvement Fund will be maintained and accounted for by the Controller so long as any moneys are on deposit in such Improvement Fund. The Commission may direct the Trustee to establish, within the Improvement Fund, separate Project Funds relating to separate Series of bonds. Upon completion of the acquisition and construction of the Project, the Commission may direct the transfer of any remaining balance in the Improvement Fund to any other fund or account of the Commission.

The moneys in the Improvement Fund will to be held by the Treasurer in trust and applied to the costs of acquisition, construction, expansion, improvement, financing and refinancing of the Project and the expenses incident thereto or connected therewith including, if necessary, interest to the extent permitted by law, reimbursement to the Commission for expenses incurred prior to the issuance of the Series of 1985 Bonds and subsequent to the date of the election referred to in the preambles to the Indenture or in connection with the

Enterprise, architectural, engineering and inspection fees and expenses, apparatus, equipment and furnishings for the Enterprise, testing and inspection, surveys, insurance premiums, losses during construction not insured against because of deductible amounts, the fees and expenses of the Trustee, including fees and expenses as fiscal agent for the Series of 1985 Bonds, expenses in connection with the preparation, issuance, sale and delivery of the Bonds, legal, accounting and consultant fees and expenses, and similar expenses.

The Treasurer will pay out moneys from the Improvement Fund only upon warrants drawn by the Controller in the manner provided by law. No withdrawals will be made from the Improvement Fund for any purpose not authorized by law.

**2012** Sub-Series A Project Fund. In the Sixteenth Supplemental Indenture, the Commission covenants and agrees to establish, maintain and hold within the Improvement Fund a separate account known as the "2012 Sub-Series A Project Fund," into which a portion of the proceeds of the 2012 Sub-Series A Bonds will be deposited.

The Treasurer will hold the amounts on deposit in the 2012 Sub-Series A Project Fund, which will be maintained and accounted for by the Controller so long as any moneys are on deposit therein. Upon completion of the 2012 Sub-Series A Project, the Commission may direct the transfer of any remaining balance in the 2012 Sub-Series A Project Fund to any other lawfully available fund or account of the Commission; provided such transfer is consistent with the Commission's covenants in the Tax Certificate (as defined below).

The moneys in the 2012 Sub-Series A Project Fund will be held by the Treasurer in trust and applied to the costs of the 2012 Sub-Series A Project and the expenses incident thereto or connected therewith, including, if necessary, interest to the extent permitted by law, reimbursement to the Commission for expenses incurred prior to the issuance of the 2012 Sub-Series A Bonds or in connection with the Enterprise, architectural, engineering and inspection fees and expenses, apparatus, equipment and furnishings for the Enterprise, testing and inspection, surveys, insurance premiums, losses during construction not insured against because of deductible amounts, the fees and expenses of the Trustee, legal accounting and consultant fees and expenses, and similar expenses.

All moneys held by the Treasurer in the 2012 Sub-Series A Project Fund may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Treasurer. The Treasurer will pay out moneys from the 2012 Sub-Series A Project Fund only upon warrants drawn by the Controller in the manner provided by law. No withdrawals may be made from the 2012 Sub-Series A Project Fund for any purpose not authorized by law.

**2012** Sub-Series C Refunding Fund. In the Eighteenth Supplemental Indenture, the Commission covenants and agrees to establish, maintain and hold a separate fund known as the "2012 Sub-Series C Refunding Fund," into which a portion of the proceeds of the 2012 Sub-Series C Bonds will be deposited.

The moneys in the 2012 Sub-Series C Refunding Fund will be held by the Trustee in trust and applied to the defeasance of all or a portion of the 2001 Series A Bonds and 2002 Series A Bonds pursuant to the provisions of the Escrow Agreement.

**2012 Series ABC Costs of Issuance Fund**. The Trustee will deposit a portion of the proceeds of the 2012 Series ABC Bonds in a separate fund to be known as the "2012 Series ABC Costs of Issuance Fund" which the Trustee agrees to establish and maintain. The money in the 2012 Series ABC Costs of Issuance Fund will be used and disbursed in the manner provided in such Indenture for the purpose of paying all costs of issuance incidental to or connected with the issuance of the 2012 Series ABC Bonds (or for making reimbursements to the Commission or any other person, firm or corporation for such costs theretofore paid by such person or it). Any balance of money remaining in the 2012 Series ABC Costs of Issuance Fund after the payment of all costs incidental to or connected with the issuance of the 2012 Series ABC Bonds or on the dates set forth in the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, whichever is earlier, will be transferred by the Trustee to the 2012 Series ABC Reserve Account to the extent necessary at that time to restore the amount in the 2012 Series ABC Reserve Account in the Sixteenth Supplemental Indenture, the Seventeenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth Supplemental Indenture, the Seventeenth Supplemental Indenture and the Eighteenth S

**Issuance of Additional Series of Bonds; General.** In addition to the 2012 Series ABC Bonds and the Outstanding Bonds, the Commission may, subject to the requirements of the Law, by Supplemental Indenture establish one or more other Series of Bonds payable from Revenues on a parity with the Bonds and secured by a lien upon and pledge of Revenues equal to the lien and pledge securing the Bonds, and the Commission may issue and the Trustee may authenticate and deliver Bonds of any Series so established, in such principal amount and for such lawful purpose or purposes (including refunding of any Bonds issued under the Indenture and then Outstanding) as will be determined by the Commission in said Supplemental Indenture, but only upon compliance by the Commission with the provisions of the Indenture and subject to the following specific conditions, which are made conditions precedent to the issuance of any such additional Series of Bonds:

(a) The Commission will not be in default under the Indenture or any Supplemental Indenture.

(b) The Supplemental Indenture providing for the issuance of such additional Series of Bonds will require that the Bond Reserve Fund to be established pursuant to the Indenture be increased, if and to the extent necessary, forthwith upon the receipt of the proceeds of the sale of such additional Series of Bonds to an amount at least equal to the Required Reserve. Said deposit may be made from such proceeds or any other source, as provided in the Supplemental Indenture.

(c) The Bonds of such additional Series will be payable as to principal either semiannually on May 1 and November 1 of each year in which principal falls due or annually on November 1 of each year in which principal falls due, provided that Term Bonds of any Series will have a principal maturity date of November 1. The Bonds of such additional Series that are Current Interest Bonds will be payable as to interest semiannually on May 1 and November 1 of each year excepting the first year, provided that the first installment of interest may be payable on either May 1 or November 1 and will be for a period of not longer than twelve months and that the interest will be payable thereafter semiannually on May 1 and November 1, and further provided that interest on any Bonds constituting Variable Rate Indebtedness or Tender Indebtedness may be payable on such Payment Dates as will be specified in the Supplemental Indenture providing for the issuance of such Bonds.

(d) Fixed serial maturities or mandatory Minimum Sinking Fund Account Payments, or any combination thereof, will be established in amounts sufficient to provide for the retirement of all of the Bonds of such additional Series on or before their respective maturity dates, unless such Bonds are Balloon Indebtedness.

(e) The aggregate principal amount of Bonds issued under the Indenture will not exceed any limitation imposed by law or by any Supplemental Indenture.

(f) The representations and estimates set forth in the certificates and written reports required by the Indenture can be made by the parties required to give such certificates and written reports.

(g) If then required by law, the issuance of such additional Series of Bonds must be approved by the qualified voters voting on a proposition to authorize the issuance of said Series of Bonds.

**Issuance of Additional Series of Bonds for Refunding**. In addition to the 2012 Series ABC Bonds, the Commission may, subject to the requirements of the Law (including the provisions of any resolution or ordinance of the Board of Supervisors), by Supplemental Indenture establish one or more other Series of Bonds payable from Revenues on a parity with the 2012 Series ABC Bonds and secured by a lien upon and pledge of Revenues equal to the lien and pledge securing the 2012 Series ABC Bonds, and the Commission may issue, and the Trustee may authenticate and deliver Bonds of any Series so established, for the purpose of refunding any Bonds issued under the Indenture and then Outstanding, but only upon compliance by the Commission with the provisions of the Indenture, and subject to the following specific conditions, which are made conditions precedent to the issuance of any such additional Series of Bonds:

(a) The Supplemental Indenture providing for the issuance of such additional Series of Bonds will require that the Bond Reserve Fund to be established pursuant to the Indenture be increased, if necessary, forthwith upon the receipt of the proceeds of the sale of such additional Series of Bonds to an amount at least equal to the Required Reserve. Said deposit may be made from such proceeds or any other source, as provided in said Supplemental Indenture.

(b) The Bonds of such additional Series will be payable as to principal either semiannually on May 1 and November 1 of each year in which principal falls due or annually on November 1 of each year in which principal falls due, provided that Term Bonds of any Series will have a principal maturity date of November 1. The Bonds of such additional Series that are Current Interest Bonds will be payable as to interest semiannually on May 1 and November 1 of each year excepting the first year, provided that the first installment of interest may be payable on either May 1 or November 1 and will be for a period of not longer than twelve months and that the interest will be payable thereafter semiannually on May 1 and November 1, and further provided that interest on any Bonds constituting Variable Rate Indebtedness or Tender Indebtedness may be payable on such Payment Dates as will be specified in the Supplemental Indenture providing for the issuance of such Bonds.

(c) Fixed serial maturities or mandatory Minimum Sinking Fund Account Payments, or any combination thereof, will be established in amounts sufficient to provide for the retirement of all of the Bonds of such additional Series on or before their respective maturity dates, unless such Bonds are Balloon Indebtedness.

(d) The aggregate principal amount of Bonds issued under the Indenture will not exceed any limitation imposed by law or by any Supplemental Indenture.

(e) The proceeds of the Bonds of such additional Series will be used, together with any other available moneys, to refund (by defeasance, current refunding or crossover refunding) all or a portion of the Bonds then Outstanding, and the Average Annual Debt Service for the Bonds of such additional Series (during the period from their issuance to their last maturity date) will be equal to or less than the Average Annual Debt Service on the Bonds to be refunded (during the period from the issuance of the additional Series to the last maturity date of the Bonds to be refunded.)

(f) The statements set forth in the certificate required by the Indenture can be made by the party required to give such certificate.

(g) If then required by law, the issuance of such additional Series of Bonds will have been approved by the qualified voters voting on a proposition to authorize the issuance of said Series of Bonds.

**Proceedings for the Issuance of Additional Series of Bonds**. Whenever the Commission will determine to issue an additional Series of Bonds pursuant to the Indenture, the Commission will execute or adopt a Supplemental Indenture providing for the issuance of such additional Series of Bonds, specifying the maximum principal amount of Bonds of such Series and prescribing the terms and conditions of such additional Series of Bonds, including the terms and conditions of any Letter of Credit Agreement with respect to the Letter of Credit securing such additional Series of Bonds, if any.

Such Supplemental Indenture will prescribe the form or forms of Bonds of such additional Series and, subject to the provisions of the Indenture, will provide for the distinctive designation, denominations, methods of execution and numbering, dating, maturity dates, interest rates, interest payment dates, provisions for redemption prior to maturity and methods and places of payment of principal and interest.

The Commission may by such Supplemental Indenture prescribe any other provisions respecting the Bonds of such Series not inconsistent with the terms of the Indenture, including registration, transfer and exchange provisions, provisions for the payment of principal and interest and sinking fund provisions.

Before such additional Series of Bonds will be issued and delivered, the Commission will file the following documents with the Trustee:

(a) An Opinion of Counsel setting forth (1) that such counsel has examined the Supplemental Indenture and found it to be in compliance with the requirements of the Indenture; (2) that the execution and delivery of the additional Series of Bonds have been sufficiently and duly authorized by the Commission; and (3) that said additional Series of Bonds, when duly executed by the Commission and, if required, authenticated and delivered by the Trustee, will be valid and binding special obligations of the Commission, payable from Revenues as provided in the Indenture.

(b) If such additional Series of Bonds are being issued pursuant to the Indenture, a Certificate of the Commission that the requirement of (a) under "Issuance of Additional Series of Bonds; General" has been met.

(c) The required certificates and reports under subparagraph (1) or (2) below:

(1) If the additional Series of Bonds are being issued pursuant to the requirements set forth under "Issuance of Additional Series of Bonds; General" (see above), the following certificates:

(A) A Certificate of the Commission setting forth (i) for any period of 12 consecutive calendar months out of the 18 calendar months next preceding the authentication and delivery of such Series of Bonds, the Net Revenues for such 12-month period, and (ii) the Debt Service for such 12-month period, and demonstrating that for such 12-month period Net Revenues equaled at least 1.25 times Annual Debt Service;

(B) If any portion of the proceeds of such Series of Bonds is to be used to finance construction, a certificate of the Consulting Engineers setting forth (i) the estimated date of completion for the portion of the Project for which such Series of Bonds is being issued and for any other uncompleted portion of the Project, and (ii) an estimate of the cost of construction of such portion of the Project and of any other uncompleted portion of the Project;

(C) A written report of a Qualified Independent Consultant setting forth for each of the next three Fiscal Years, or if any portion of the proceeds of such Series of Bonds is to be used to finance construction, the three Fiscal Years following the Fiscal Year in which the Consulting Engineers estimate such portion of the Project will be completed, estimates of (i) Revenues, (ii) Operation and Maintenance Costs of the Enterprise and (iii) Net Revenues; and

(D) A Certificate of the Commission setting forth (i) the estimates of Net Revenues, as set forth in the written report of the Qualified Independent Consultant pursuant to paragraph (C) above, for each of such three Fiscal Years, (ii) the Annual Debt Service for each of such three Fiscal Years, including Annual Debt Service as estimated in such Certificate of the Commission with respect to future Series of Bonds, if any, which such Certificate of the Commission will estimate (based on the estimate of the Consulting Engineers of the cost of construction of such portion of the Project and other uncompleted portions of the Project) will be required to complete payment of the cost of construction of such portion of the Project and any other uncompleted portion of the Project, and demonstrating that the estimated Net Revenues in each of the Fiscal Years set forth in (i) above is at least equal to 1.25 times the Annual Debt Service for the corresponding Fiscal Year as set forth in (ii) above.

Said certificate or certificates or written report will be filed after the sale of the additional Series of Bonds proposed to be issued (but prior to the delivery thereof and receipt of payment therefor), and will, respect to such additional Series of Bonds, be based upon the actual interest rate or rates determined at the time of sale thereof.

(2) If the additional Series of Bonds are being issued pursuant to the requirements set forth under "Issuance of Additional Series of Bonds for Refunding" (see above), a certificate of an Independent Certified Public Accountant that the requirements stated under (e) under such caption have been met. Said certificate will be filed after the sale of the additional Series of Bonds proposed to be issued (but prior to the delivery thereof and receipt of payment therefor), and will, with respect to such additional Series of Bonds, be based upon the actual interest rate or rates determined at the time of sale thereof.

(d) The Supplemental Indenture, duly executed or certified and approved by the Trustee.

Upon the delivery to the Trustee of the foregoing instruments, the Trustee will authenticate and deliver the additional Series of Bonds, in the aggregate principal amount specified in such Supplemental Indenture, to, or upon the Written Request of the Commission, when such additional Series of Bonds will have been presented to it for that purpose.

None of the limitations or restrictions on the issuance of additional Series of Bonds set forth under "Proceedings for the Issuance of Additional Series of Bonds" will be applicable to any additional Series of Bonds which are to be issued solely for the purpose of refunding and retiring all of the Bonds issued pursuant to the Indenture and then Outstanding, and nothing contained in the Indenture will limit the issuance of any additional Series of Bonds if, after the issuance and delivery of such additional Series of Bonds, none of the Bonds theretofore authorized pursuant to the Indenture will be Outstanding or the Commission will have discharged the entire indebtedness on all Bonds Outstanding pursuant to the defeasance provisions of the Indenture.

**Consent Required for Issuance of Additional Bonds**. So long as any of the Bonds remain Outstanding, the Commission will not issue any Additional Bonds or obligations payable from Revenues on a parity with the Bonds except pursuant to the provisions of the Indenture described above under the caption Proceedings for the Issuance of Additional Series of Bonds unless the Owners of a majority in aggregate amount of the Bond Obligation and any Credit Provider will have consented in writing to the issuance of such Additional Bonds or obligations.

## **REVENUES AND FUNDS**

**Pledge and Assignment of Revenues; Revenue Fund**. (a) In accordance with the Charter, but subject to the budget and fiscal provisions of the Charter, whenever revenue bonds issued by the Commission pursuant to the Charter or refunding bonds of such revenue bonds are Outstanding, the entire gross revenue of the Enterprise will be set aside and deposited into a fund in the City treasury heretofore established and known as the "Enterprise Revenue Fund" (the "Revenue Fund"). All amounts paid into such fund will be maintained by the Treasurer separate and apart from all other City funds and will be secured by the Treasurer's official bond or bonds.

(b) Moneys in the Revenue Fund, including earnings thereon, will be appropriated, transferred, expended or used for the following purposes pertaining to the financing, maintenance and operation of the Enterprise and related facilities owned, operated or controlled by the Commission and only in accordance with the following priority:

(1) the payment of operation and maintenance expenses for such utility and related facilities;

(2) the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Commission may establish or the Board of Supervisors may require with respect to employees of the Commission;

(3) the payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure revenue bonds issued by the Commission for the acquisition, construction or extension of the Enterprise or related facilities owned, operated or controlled by the Commission as provided in the Indenture;

(4) the payment of principal and interest on general obligation bonds issued by the City for Enterprise purposes;

(5) reconstruction and replacement as determined by the Commission or as required by any Enterprise revenue bond ordinance duly adopted and approved;

(6) the acquisition of land, real property or interest in real property for, and the acquisition, construction, enlargement and improvement of, new and existing buildings, structures, facilities, equipment, appliances and other property necessary or convenient to the development or improvement of such utility owned, controlled or operated by the Commission; and for any other lawful purpose of the Commission including the transfer of surplus funds pursuant to the Charter.

(c) Subject to the provisions of subsection (a) and (b) above, all of the Revenues (except amounts on deposit in the Rebate Fund) are irrevocably pledged to the punctual payment of the principal of and interest and redemption premium, if any, on the Bonds and the Policy Costs, and the Revenues will not be used for any other purpose while any of the Bonds remain Outstanding or Policy Costs remain unpaid; except that the Revenues may be used for such purposes as are expressly permitted in the Charter and in the Indenture. Pursuant to Section 5451 of the California Government Code, such pledge will constitute a lien on and security interest in the Revenues for the payment of the Bonds and the Policy Costs in accordance with the terms thereof and of the Indenture, and will immediately attach to the collateral and be effective, binding, and enforceable against the Commission, its successors, purchasers of the Revenues, creditors and all others asserting any rights thereto, irrespective of whether such parties have notice of such pledge and without the need for any physical delivery, recordation, filing or further act.

All moneys remaining in the Revenue Fund on the tenth day of each month (or on such earlier day of each month as the transfers required to the Interest Fund, Principal Fund, Sinking Fund Accounts and the Bond Reserve Fund will have been completed) and attributable to the preceding calendar month, after the setting aside and transferring of all of the amounts required to be set aside or transferred by the Treasurer by the provisions in the Indenture as required to the Interest Fund, Principal Fund, Sinking Fund Accounts and the Bond Reserve Fund, will be deposited by the Treasurer in accordance with the Charter. The inability of the Treasurer to make any deposit for any of the purposes provided for in paragraph (4), (5), or (6) of subsection (b) above by reason of a lack of Revenues available therefor will not constitute an Event of Default under the Indenture. If at any time any moneys so deposited are needed to pay the interest on or principal of the Bonds, or to pay Operation and Maintenance Costs of the Enterprise for the then current Fiscal Year for which no adequate budgeted amount was provided by the Commission, the Treasurer may transfer such moneys for such purpose. Any such transfer will be replenished from Revenues when moneys are available for deposit in the particular fund from which the transfer was made, after all required transfers to funds having a higher priority have been made.

Deposit and Investment of Moneys in Funds; Interest Rate Swaps. All moneys held by the Treasurer in the Revenue Fund or the Improvement Fund, or for certain purposes set forth in the Indenture may be invested in Legal Investments maturing not later than the date on which such moneys are required for payment by the Treasurer. All moneys held by the Trustee and allocated to any of the funds held by it, subject to the restrictions set forth in the Rebate Certificate, will be held in time or demand deposits (including certificates of deposit) in any bank or trust company (including the Trustee) authorized to accept deposits of public funds, and will be secured at all times by such obligations, and to the fullest extent, as is required by law, and may be invested in Permitted Investments, maturing not later than the date on which such moneys are required for payment by the Trustee, except that moneys in the Bond Reserve Fund may be deposited or invested in deposits or Permitted Investments which mature not more than seven years from the date of investment or the final date of maturity of the Outstanding Bonds, whichever is earlier. If at any time any of the investments stated to be Permitted Investments under the Indenture cease to be a legal investment for funds held under the Indenture, the Commission will so advise the Trustee by a Written Statement of the Commission. The Trustee will not be responsible for making any investment which is not a legal investment if the Commission will not have previously delivered a Written Request or Written Statement of the Commission correctly advising the Trustee that such investment was no longer a legal investment. For the purpose of determining the amount of money in the Bond Reserve Fund, all investments of moneys therein will be valued annually on October 31 at the market value of such investments. All interest received on any moneys so invested by the Treasurer or the Trustee will be deposited in and for the purpose of the Revenue Fund, except that all interest received on any moneys so invested in the Principal Fund or Interest Fund will remain in such fund, and further except that prior to receipt by the Trustee of notice of completion of construction of the Project or any portion thereof all interest received on any moneys so invested in the Improvement Fund or in the Bond Reserve Fund will remain in, or be transferred to and deposited in, the Improvement Fund held by the Treasurer. Upon completion of construction of the Project or any such portion thereof, the Commission will file with the Trustee a Certificate or Written Statement of the Commission stating the fact and date of such completion of construction.

The Trustee may sell or present for redemption any obligations so purchased by it whenever it is necessary in order to provide moneys to meet any payment, and the Trustee will not be liable or responsible for any loss resulting from such investment.

The Trustee may act as principal or agent in the acquisition or disposition of any investment.

The Trustee may commingle any of the moneys held by it pursuant to the Indenture for investment purposes only; provided, however, that the Trustee will account separately for the moneys belonging to each fund or account established pursuant to the Indenture and held by it.

The Commission may and the Trustee will, upon the Written Request or Written Statement of the Commission, and provided that the Trustee is supplied with an Opinion of 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 Commission or the Trustee, if any, pursuant to such a swap agreement may be applied to the deposits required under the Indenture. The entity with which the Commission or the Trustee may contract for an interest rate swap is limited to entities that are rated in one of the two highest short-term or long-term debt rating categories by Moody's and S&P. If the Commission so designates, amounts payable under the interest rate swap agreement will be made on a parity basis with payments on the Bonds and, in such event, the Commission will 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 relates.

## SELECTED COVENANTS OF THE COMMISSION

**Payment of Principal and Interest**. The Commission will punctually pay or cause to be paid the principal and interest (and premium, if any) to become due in respect of every Bond issued under the Indenture at the times and places and in the manner provided in the Indenture and in the Bonds, in strict conformity with the terms of the Bonds and of the Indenture, but solely from Revenues as provided in the Indenture.

Against Encumbrances. Subject to any rights of the United States of America or the State of California, the Commission will not mortgage or otherwise encumber, pledge or place any charge upon the Enterprise or any part thereof, or upon any of the Revenues, prior to or on a parity with the Bonds, provided that Letter of Credit Agreements entered into in connection with Balloon Indebtedness, Variable Rate Indebtedness or Tender Indebtedness may be payable on a parity with the Bonds.

So long as any Bonds are Outstanding, the Commission will not issue any bonds or obligations payable from Revenues or secured by a pledge, lien or charge upon Revenues prior to or on a parity with the Bonds, other than the Bonds, provided that Letter of Credit Agreements entered into in connection with Balloon Indebtedness, Variable Rate Indebtedness or Tender Indebtedness may be payable on a parity with the Bonds.

Nothing in the Indenture, and particularly nothing in the preceding two paragraphs, will prevent the Commission from authorizing and issuing bonds, notes, warrants, certificates or other obligations or evidences of indebtedness which as to principal or interest, or both, (1) are payable from Revenues after and subordinate to the payment from Revenues of the principal of and interest on the Bonds, or (2) are payable from moneys which are not Revenues as such term is defined in the Indenture.

Sale or Other Disposition of Property. The Commission will not sell or otherwise dispose of the Enterprise or any part thereof essential to the proper operation of the Enterprise or to the maintenance of the Revenues except as expressly permitted in the Indenture. The Commission will not enter into any lease or agreement which impairs the operation of the Enterprise or impedes the rights of the Owners of the Bonds with respect to the Revenues or the operation of the Enterprise, but the Commission may enter into any lease or agreement concerning all or any part of the Enterprise if such lease or agreement will not impair the operation of the Enterprise if such lease or agreement will not impair the operation of the Enterprise or impede the rights of the Owners of the Bonds with respect to the Revenues or the operation of the Enterprise if such lease or agreement will not impair the operation of the Enterprise.

Any real or personal property which has become nonoperative or which is not needed for the efficient and proper operation of the Enterprise, or any material or equipment which has worn out, may be sold if all of the net proceeds of such sale (less any amounts payable to the United States of America or the State of California or required by the United States of America or the State of California to be deposited in a restricted fund) are deposited in the Revenue Fund.

The Commission reserves the right to sell all or a portion of the Enterprise, and to enter into and execute agreements for and to complete such sale, but subject to the following specific conditions, which are made conditions precedent to such sale:

(1) The Commission will be in compliance with all covenants set forth in the Indenture, and in all Supplemental Indentures theretofore adopted by the Commission, and a Certificate of the Commission to that effect will have been filed with the Trustee.

(2) The Commission will have determined by resolution whether the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the redemption of Bonds or for the making of additions or improvements to or extensions of the Enterprise.

(3) If the Commission will have determined that the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the redemption of Bonds, such proceeds of the sale will be deposited with the Trustee, and the following conditions will have been satisfied:

(i) The Commission will have adopted a resolution providing for the redemption of the maximum principal amount of Bonds which can be redeemed from such proceeds of such sale, or, in the event that no Bonds are subject to redemption on the next succeeding interest payment date, directing the Trustee (A) to hold such proceeds in trust, (B) to invest such proceeds in the investments permitted by the Indenture until any Bonds become redeemable, subject to any restrictions imposed by the Indenture, (C) to deposit the interest and income on such proceeds in the Revenue Fund as such interest and income is received, and (D) to use such proceeds to redeem Bonds in the amount and manner specified in the Indenture and any Supplemental Indenture on the first interest payment date on which the Bonds can be redeemed; and a certified copy of such resolution will have been filed with the Trustee, along with a Written Request or Certificate of the Commission containing such direction.

(ii) If such proceeds are not to be immediately used for the redemption of Bonds but instead are to be held by the Trustee until Bonds become redeemable, the Commission will have filed with the Trustee a written report of an Independent Certified Public Accountant stating (A) the amount of proceeds to be deposited with the Trustee from such sale, (B) an estimate of the total amount of Bond Obligation and the amount of Bonds of each maturity which could be redeemed from such proceeds on the first interest payment date on which Bonds are redeemable, and (C) the estimated annual interest and income to be earned on such proceeds while held and invested by the Trustee. Such interest and income on such proceeds upon receipt by the Trustee will be deposited in the Revenue Fund and will be treated as Revenues for all purposes of the Indenture, including determining whether the Commission is in compliance with the rate covenant contained in the Indenture.

(iii) If such proceeds of such sale are to be immediately used to redeem Bonds, the Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of the adoption by the Commission of the resolution authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, all as shown by a certificate or opinion of an Independent Certified Public Accountant or a written report of a Qualified Independent Consultant, will have produced a sum equal to at least 1.25 times Maximum Annual Debt Service on the Bonds to be Outstanding following the redemption of Bonds from the proceeds of such sale.

(iv) If such proceeds are not to be immediately used for the redemption of Bonds but instead are to be held by the Trustee until Bonds become redeemable, the Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of adoption by the Commission of the resolution authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, plus an allowance for the estimated annual interest or income to be earned on the invested proceeds of such sale while held and invested by the Trustee, all as shown by a certificate or opinion of an Independent Certified Public Accountant or a written report of a Qualified Independent Consultant, will have produced a sum equal to at least 1.25 times Maximum Annual Debt Service.

(4) If the Commission, will have determined that the net proceeds of the sale (less any amounts payable to the United States of America or the State of California or required to be deposited in a restricted fund) are to be used for the making of additions or improvements to or extensions of the Enterprise, such proceeds of the sale will be deposited by the Treasurer in a special fund in trust to be held by the Treasurer to be used for the making of additions or improvements to or extensions of the Enterprise, and the condition set forth in the following sentence will have been satisfied. The Net Revenues for the last Fiscal Year or last recorded twelve-month period preceding the date of the adoption by the Commission of the portion authorizing such sale, less a deduction for the portion of such Net Revenues attributable to the portion of the Enterprise to be sold, all as shown by a written report of an Independent Certified Public Accountant, plus

(i) An allowance for Net Revenues from any additions or improvements to or extensions of the Enterprise to be made with the proceeds of such sale or with the proceeds of Bonds previously issued, and also for Net Revenues from any such additions, improvements or extensions which have been made from moneys from any source but which, during all or any part of such Fiscal Year or recorded twelve-month period, were not in service, all in an amount equal to one hundred percent (100%) of the estimated additional average annual Net Revenues to be derived from such additions, improvements and extensions for the first twenty-four months in which each addition, improvement or extension is respectively to be in operation, all as shown by the certificate or opinion of a Qualified Independent Consultant; and

(ii) An allowance for earnings arising from any increase in the charges made for the use of the Enterprise which has become effective prior to such sale, but which, during all or any part of such Fiscal Year or recorded twelve-month period, was not in effect, in an amount equal to one hundred percent (100%) of the amount by which the Net Revenues would have been increased if such increase in charges had been in effect during the whole of such Fiscal Year or recorded twelve-month period, as shown by the certificate or opinion of a Qualified Independent Consultant;

will have produced a sum equal to at least 1.25 times the Maximum Annual Debt Service on the Bonds then Outstanding. Any balance of such proceeds from any such sale not required by the Commission for the purposes aforesaid will be deposited in the Revenue Fund established pursuant to the Indenture and applied as provided in the Indenture.

**Operation and Maintenance of Enterprise**. The Commission will maintain and preserve the Enterprise in good repair and working order at all times from the Revenues available for such purposes, in conformity with standards customarily followed for municipal water supply, storage and distribution systems of like size and character. The Commission will from time to time make all necessary and proper repairs, renewals, replacements and substitutions to the properties of the Enterprise, so that at all times business carried on in connection with the Enterprise will and can be properly and advantageously conducted in an efficient manner and at reasonable cost, and will operate the Enterprise in an efficient and economical manner, consistent with the protection of the Owners of the Bonds, and will not commit or allow any waste with respect to the Enterprise.

Liens and Claims. Subject to any rights of the United States of America or the State of California, the Commission will keep the Enterprise and all parts thereof free from judgments, from mechanics' and materialmen's liens and from all liens and claims of whatsoever nature or character, to the end that the security provided pursuant to the Indenture may at all times be maintained and preserved, and the Commission will keep the Enterprise and the Revenues free from any liability which might hamper the Commission in conducting its business or operating the Enterprise. Subject to the provisions of the Indenture, the Trustee at its option (after first giving the Commission thirty days' written notice to comply therewith and failure of the Commission to so comply within said thirty-day period) may defend against any and all actions or proceedings in which the validity of the Indenture is or might be questioned, or may pay or compromise any claim or demand asserted in any such actions or proceedings; provided, however, that, in defending against such actions or proceedings or in paying or compromising such claims or demands, the Trustee will not in any event be deemed to have waived or released the Commission from liability for or on account of any of its covenants and warranties contained in the Indenture, or from its liability under the Indenture to defend the validity of the Indenture and the pledge made in the Indenture and to perform such covenants and warranties.

**Insurance**. The Commission will procure, and maintain at all times while any of the Bonds will be Outstanding, adequate fidelity insurance or bonds on all officers and employees handling or responsible for any Revenues or funds of the Enterprise, such insurance or bonds to be in an aggregate amount at least equal to the maximum amount of such Revenues or funds at any one time in the custody of all such officers and employees or in the amount of one million dollars (\$1,000,000), whichever is less.

The insurance described above may be provided as a part of any comprehensive fidelity and other insurance and not separately for the Enterprise.

The Commission may purchase, on all or any of the Bonds of any Series, insurance assuring the Bondowners that the principal of and interest on the insured Bonds will be paid when due and payable. The purchase of any such insurance will not constitute a preference or priority of the insured Bonds over any Bonds not so insured, and all Bonds Outstanding, irrespective of the providing of such insurance on some of the Bonds, will be equally and proportionately secured.

**Books and Accounts; Financial Statements**. The Commission will keep proper books of record and accounts of the Enterprise, separate from all other records and accounts of the Commission, in which complete and correct entries will be made of all transactions relating to the Enterprise. Such books of record and accounts will at all times during business hours be subject to the inspection of the Trustee or of any Owner of Bonds then Outstanding or their representatives authorized in writing, at reasonable hours and under reasonable conditions.

The Commission further will prepare and file with the Trustee annually, within five months after the close of each Fiscal Year so long as any of the Bonds are Outstanding, financial statements of the Enterprise for the preceding Fiscal Year, prepared in accordance with generally accepted accounting principles applied on a consistent basis from year to year (which financial statements will include a statement showing the balances in each fund required to be established under the provisions of the Indenture), including a balance sheet, statement of income, statement of retained earnings and contributed capital, and statement of changes in financial position, which financial statements will be examined by and include the certificate or opinion of an Independent Certified Public Accountant. Such financial statements will be accompanied by a Certificate of the Commission stating that no Event of Default has occurred or is continuing as of the end of each Fiscal Year, or specifying the nature of the Events of Default, if any, which have occurred and are continuing.

The Commission will furnish a copy of these financial statements to any Bondowner upon request, and will furnish to the Trustee such reasonable number of copies thereof (not exceeding 100 copies) as may be required by the Trustee for distribution to investment bankers, security dealers and others interested in the Bonds and to the

Owners of Bonds requesting copies thereof. The Trustee will not be required to incur any nonreimbursable expenses in making such distribution.

The Commission will cause to be published a summary statement showing the amount of Revenues and the amount of all other funds collected which are required to be pledged or otherwise made available as security for payment of the principal of and interest on the Bonds, the disbursements from such Revenues and other funds in reasonable detail, and a general statement of the financial and physical condition of the Enterprise. The statement will be published annually, not more than 120 days after the close of each Fiscal Year. The Commission will furnish a copy of the statement to any Bondowner upon request.

Enterprise Budgets. The Commission will prepare and submit to the Mayor for review and submission to the Board of Supervisors for approval an annual budget for the Enterprise for each Fiscal Year. Such budget will set forth in reasonable detail the Revenues anticipated to be derived in such Fiscal Year and the expenditures anticipated to be paid or provided for therefrom in such Fiscal Year including, without limitation, the amounts required to provide for the payment of the principal of and interest and redemption premium, if any, on the Bonds during such Fiscal Year, to pay or provide for Operation and Maintenance Costs of the Enterprise for such Fiscal Year, to make up any deficiencies in any fund or account anticipated for the then current Fiscal Year, and to pay or provide for the payment of all other claims or obligations required to be paid from Revenues in such Fiscal Year, and will show that Net Revenues will be at least adequate to satisfy the provisions of the Section 6.13 entitled "Covenants of the Commission - Amounts of Rate and Charges" in the Indenture. Such budget will comply with any conditions or restrictions set forth in any agreements between the Commission and users of the Enterprise. The Commission will take all action available and necessary to obtain approval or acceptance of the budget by the Mayor and the Board of Supervisors. The Commission will supply to the Trustee and to any Bondowner who will so request in writing a copy of the annual budget for the Fiscal Year covered by such budget. Such budget will be open for inspection by any Owner at the principal corporate trust office of the Trustee during normal business hours. If at any time a revised annual budget for the Enterprise will be adopted which will involve an increase or decrease in the Revenues or in said expenditures of ten percent (10%) or more, the Commission will supply a copy to the Trustee and to any Bondowner who will so requests in writing.

**Maintenance of Revenues; Merger with Hetch Hetchy Project**. The City will not acquire, construct, operate or maintain, and will not within the scope of its powers permit any other public or private corporation, political subdivision, district or agency or any person whatsoever to acquire, construct, operate or maintain, within the City or any part thereof, any system or utility competitive with the Enterprise. The Commission will have in effect, or cause to have in effect, at all times an ordinance or resolution requiring all customers of the Enterprise to pay the fees, rates and charges applicable to the water, services and facilities furnished by the Enterprise. The Commission will not provide any water service of the Enterprise free of charge to any person, firm or corporation, or to any public agency (including the United States of America, the State of California, and any public corporation, political subdivision, city, county, district or agency of any thereof), except (i) for free use by the City and its agencies, (ii) to the extent that any such free use is required by the terms of any existing contract or agreement and (iii) for incidental insignificant free use so long as such free use does not prevent the Commission from satisfying the other covenants of the Indenture.

The Commission will not take any action pursuant to the Charter to accomplish a merger of the Enterprise with the Hetch Hetchy Project, a department of the City under the jurisdiction of the Commission, unless and until the Commission will have provided a method for segregating the Revenues from the revenues of the Hetch Hetchy Project so as to preserve the lien of the Indenture upon the Revenues, and will have obtained an opinion of counsel from a firm nationally recognized in the practice of tax-exempt financing that such merger will not, in and of itself, affect the exclusion from gross income of the interest on the Bonds under Section 103 of the Code.

**Eminent Domain Proceeds**. If all or any part of the Enterprise will be taken by or under threat of eminent domain proceedings, the net proceeds realized by the Commission or the City therefrom (excluding any portion thereof payable to the United States of America or the State of California or required by the United States of America or the State of California to be deposited in a restricted fund) will be deposited by the Treasurer in a special fund in trust and applied and disbursed by the Treasurer subject to the following conditions:

(a) If such eminent domain proceedings have had a material adverse effect upon the Revenues and the security of the Bonds, the Commission will by resolution determine to apply such proceeds for one of the following purposes:

(1) The Commission may determine to apply such proceeds to the purchase, defeasance or redemption of Bonds then Outstanding. In that event, the Treasurer will transfer such proceeds to the Trustee who will apply such proceeds on a Proportionate Basis to the redemption, defeasance or purchase of Bonds of each Series then Outstanding in the proportion which the Bond Obligation amount of each Series bears to the aggregate Bond Obligation amount of all Bonds then Outstanding.

(2)The Commission may determine to apply such proceeds to the cost of additions or improvements to or extensions of the Enterprise if (A) the Commission first secures and files with the Trustee a written report of a Qualified Independent Consultant showing (i) the loss in annual Revenues, if any, suffered, or to be suffered, by the Commission by reason of such eminent domain proceedings, (ii) a general description of the additions, improvements or extensions then proposed to be acquired by the Commission from such proceeds, and (iii) an estimate of the additional Revenues to be derived from such additions, improvements or extensions; and (B) such written report states that such additional Revenues will sufficiently offset the loss of Revenues resulting from such eminent domain proceedings so that the ability of the Commission to meet its obligations under the Indenture will not be substantially impaired. The Commission will then promptly proceed with the construction of the additions, improvements or extensions substantially in accordance with such written report. Payments for such construction will be made by the Commission from such proceeds. Any balance of such proceeds not required by the Commission for the purposes aforesaid will be deposited in the Revenue Fund and applied as provided in the Indenture.

(b) If such eminent domain proceedings have had no effect, or at the most a relatively immaterial effect, upon the Revenues and the security of the Bonds, and a Qualified Independent Consultant so concludes in a written report filed with the Trustee, the Commission may determine to apply such proceeds to the costs of additions or improvements to or extensions of the Enterprise or may deposit such proceeds in the Revenue Fund, to be applied as provided in the Indenture.

## Rebate and Tax Covenants.

Rebate Fund. The Trustee will establish and maintain funds separate from any other fund established and maintained under the applicable Indenture designated as the "2012 Sub-Series A Rebate Fund," the "2012 Sub-Series B Rebate Fund," and the "2012 Sub-Series C Rebate Fund" (each, a "Rebate Fund"). Within each Rebate Fund, the Trustee will maintain such accounts as it is instructed by the Commission as are necessary in order to comply with the terms and requirements of the Tax Certificate with respect to each Rebate Fund (the "Tax Certificate"). Subject to the transfer provisions provided in the applicable Indenture, all money at any time deposited in the Rebate Fund will be held by the Trustee for the account of the Commission in trust, to the extent required to satisfy the requirements for rebate, as set forth in the Tax Certificate, for payment to the federal government of the United States of America, and no other person will have any rights in or claim to such money. All amounts deposited into or on deposit in the Rebate Fund will be governed by the applicable Indenture and by the Tax Certificate. The Trustee will be deemed conclusively to have complied with such provisions and fulfilled its obligation with respect to rebate as long as it follows the written directions of the Commission including supplying all necessary information in the manner provided in the Tax Certificate. The Trustee will not be required to take any actions under the applicable Indenture or the Tax Certificate in the absence of written directions by the Commission, and will have no liability or responsibility to enforce compliance by the Commission with the terms of the Tax Certificate nor make computations in connection therewith.

<u>Tax Covenants for the 2012 Series ABC Bonds</u>. The Commission covenants that it 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 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds, and the 2012 Sub-Series C Bonds under Section 103 of the Code. The Commission will not directly or indirectly use or permit the use

of any proceeds of the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds or the 2012 Sub-Series C Bonds or any other funds of the Commission, or take or omit to take any action that would cause the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds or the 2012 Sub-Series C Bonds to be "arbitrage bonds" within the meaning of Section 148(a) of the Code. To that end, the Commission will comply with all requirements of Section 148 of the Code to the extent applicable to the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds. If at any time the Commission is of the opinion that for purposes of the provisions of the Indenture summarized under the caption "Tax Covenants" herein it is necessary to restrict or limit the yield on the investment of any moneys held by the Trustee under the Indenture or otherwise, the Commission will so instruct the Trustee in writing, and the Trustee will take such action as required by such instructions.

Without limiting the generality of the foregoing, the Commission agrees that there will be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Code and any temporary, proposed or final Treasury Regulations as may be applied to the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds from time to time. This covenant will survive payment in full or defeasance of the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds, the 2012 Sub-Series C Bonds. The Commission specifically covenants to pay or cause to be paid to the United States of America at the times and in the amounts determined under the Indenture the Rebate Requirement. The Trustee agrees to comply with all written instructions of the Commission given in accordance with the Tax Certificate.

Notwithstanding any provision of the Indenture summarized under this caption, if the Commission provides to the Trustee an opinion of nationally recognized bond counsel to the effect that any action required under the Indenture or under the Tax Certificate is no longer required, or to the effect that some further action is required, to maintain the exclusion from gross income of the interest on the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds under Section 103 of the Code, the Commission and the Trustee may rely conclusively on such opinion in complying with such provisions of the Indenture, and the covenants under the Indenture will be deemed to be modified to that extent.

The Commission will assure that the proceeds of the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds and the 2012 Sub-Series C Bonds are not so used as to cause the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds or the 2012 Sub-Series C Bonds to satisfy the private business tests of section 141(b) of the Code or the private loan financing test of section 141(c) of the Code. The Commission will not take any action or permit or suffer any action to be taken if the result of the same would be to cause any of the 2012 Sub-Series A Bonds, the 2012 Sub-Series B Bonds or the 2012 Sub-Series C Bonds to be "federally guaranteed" within the meaning of section 149(b) of the Code.

**Continuing Disclosure**. The Commission covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Certificate, dated as of the date of issuance of the 2012 Series ABC Bonds (the "Continuing Disclosure Certificate"), executed and delivered by the Commission in connection with the issuance of the 2012 Series ABC Bonds, as it may be supplemented and amended in accordance with its terms. Notwithstanding any other provision of the Indenture, failure of the Commission to comply with the 2012 Series ABC Continuing Disclosure Certificate will not be considered an Event of Default; however, any Participating Underwriter (as such term is defined in the 2012 Series ABC Continuing Disclosure Certificate) or any Bondowner or beneficial owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the Commission to comply with the 2012 Series ABC Continuing Disclosure Certificate of the Commission to comply with the sole remedy in the event of any failure of the Commission to comply with the 2012 Series ABC Continuing Disclosure Certificate will be an action to comple performance.

## EVENTS OF DEFAULT AND REMEDIES OF BONDOWNERS

**Events of Default; Acceleration**. If one or more of the following events ("Events of Default") shall happen:

(1) if default shall be made in the due and punctual payment of the principal of, or the premium (if any) on, 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 if default shall be made in

the redemption from any Sinking Fund Account of any Term Bonds in the amounts and at the times provided therefor;

(2) if default shall be made in the due and punctual payment of any installment of the interest on any Bond when and as such interest installment shall become due and payable;

(3) if default shall be made by the Commission in the observance of any of the other covenants, agreements or conditions on its part in the Indenture or in the Bonds contained, and such default continues for a period of sixty days after written notice of such failure, specifying such default and requiring the same to be remedied, shall have been given to the Commission by the Trustee or by a Credit Provider, or to the Commission and the Trustee by the Owners of not less than twenty-five percent (25%) of the Bond Obligation; or

(4) if the Commission or the City shall file a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other applicable law of the United States of America, or if a court of competent jurisdiction shall approve a petition, filed with or without the consent of the Commission or the City, as the case may be, seeking reorganization under the federal bankruptcy laws or any other applicable law of the United States of America, or 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 Commission or the City or of the whole or any substantial part of the property of the Commission or the City.

**Remedy of Acceleration**. During the continuance of such Event of Default, the Trustee may, and, upon the written request of the Owners of not less than a majority in aggregate amount of the Bond Obligation or of a Credit Provider shall, upon notice in writing to the Commission, declare the principal of all of the Current Interest Bonds then Outstanding, and the interest accrued thereon, and of all Capital Appreciation Bonds then Outstanding, in the amount of the Accreted Value thereof, to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable, anything in the Indenture or in the Bonds contained to the contrary notwithstanding.

Bondholder Suits. In case one or more of the Events of Default shall happen, then and in every such case the Owner of any Bond at the time Outstanding shall be entitled to proceed to protect and enforce the rights vested in such Owner by the Indenture by such appropriate judicial proceeding as such Owner shall deem most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Indenture, or in aid of the exercise of any power granted in the Indenture, or to enforce any other legal or equitable right vested in the Owners of Bonds by the Indenture or by law; provided, however, that no such Bondowner shall have the right to institute any such judicial proceeding pursuant to this Section unless (a) such Owner shall have previously given to the Trustee written notice of the occurrence of an Event of Default under the Indenture; (b) the Owners of at least ten percent (10%) in aggregate amount of the Bond Obligation of the Bonds then Outstanding shall have made written request to the Trustee to exercise the powers granted in the Indenture or to institute such action, suit or proceeding in its own name; (c) such Owner or said Owners shall have tendered to the Trustee reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request; (d) the Trustee shall have refused or omitted to comply with such request for a period of sixty (60) days after such written request shall have been received by, and said tender of indemnity shall haven been made to, the Trustee; and (e) the Trustee shall not have received contrary directions from the Owners of a majority in aggregate amount of Bond Obligation of the Bonds Outstanding. The provisions of the Indenture shall constitute a contract with the Owners of the Bonds, an such contract and duties of the Commission and of the Commission members and of the officers and employees of the Commission and of the City shall be enforceable by any Bondowner by mandamus or other appropriate suit, action or proceeding in any court of competent jurisdiction.

**Application of Funds Upon Acceleration**. All of the Revenues, including all sums in all of the funds provided for in the Indenture upon the date of declaration of acceleration as provided for in the Section above entitled "Events of Default; Acceleration" and all sums thereafter received by the Commission or the Trustee under the Indenture, shall, if received by the Commission, be transmitted to the Trustee and be applied by the Trustee in the following order, upon presentation of the several Bonds--

<u>First</u>, to the payment of the costs and expenses of the Bondowners in declaring such Event of Default, including reasonable compensation to their agents, attorneys and counsel; and to the payment of the costs and expenses of the Trustee, including but not limited to reasonable compensation to its agents, attorneys and counsel;

Second, to the payment of the whole amount of the Bond Obligation then owing and unpaid upon the Bonds, with interest on, with respect to the Current Interest Bonds, the overdue principal and installments of interest, and, with respect to the Capital Appreciation Bonds, the Accreted Value thereof, at the rate or rates of interest borne by the respective Bonds, and in case such moneys shall be insufficient to pay in full the whole amount so owing and unpaid upon the Bonds, then to the payment of such principal and interest and Accreted Value without preference or priority of principal over interest, or of interest over principal, or of any installment of interest over any other installment of interest, ratably to the aggregate of such principal and interest and Accreted Value; and

<u>Third</u>, to the payment of all Policy Costs, and in case such moneys shall be insufficient to pay in full all Policy Costs owing and unpaid, then to the payment of such Policy Costs pro rata (calculated by reference to the maximum amounts available under the respective Bond Reserve Fund Policies).

**Remedies of Reserve Provider**. If the Commission fails to pay Policy Costs to a Reserve Provider to the extent and at the times required by the provisions of the Indenture and such failure continues for 30 days after written notice of such default is received by the Commission and the Trustee from such Reserve Provider or if an Event of Default concerning bankruptcy of the Commission or the City (as described in subsection (4) under the caption "Events of Default; Acceleration" above) shall occur and be continuing, then the Reserve Provider may exercise any remedy provided under the Indenture to the Trustee or available at law or in equity to protect and enforce its right to receive payment of Policy Costs; *provided, that*, in no event, will the Reserve Provider be able to declare the principal and Accreted Value of the Bonds and the interest accrued thereon to be due and payable immediately or to exercise any remedy that the Trustee, in its sole discretion, determines would adversely affect the Bondowners.

**Rights of Credit Provider**. Each Credit Provider, during any period in which an Event of Default has occurred and is continuing, will be recognized as the Owner of each Bond which it guarantees or insures for the purposes of exercising all rights and privileges available to Bondowners. Any acceleration of principal payments with respect to Bonds guaranteed or insured by a Credit Provider are subject to such Credit Provider's prior written consent (but only if such Credit Provider is not in default under its guaranty or insurance policy).

## MODIFICATION OR AMENDMENT OF THE INDENTURE

**Modification with Consent of Bondowners and Credit Providers**. The Indenture may be modified or amended at any time by a Supplemental Indenture which will become binding when the written consents of the Owners of a majority in the aggregate amount of the Bond Obligation of the Bonds (or, if such Supplemental Indenture is only applicable to a Series of Bonds, such Series of Bonds) then Outstanding (exclusive of Bonds owned or held by or for the account of the City or the Commission (but excluding Bonds held in any pension or retirement fund) as provided in the Indenture)) and of each Credit Provider (so long as such Credit Provider is not in default under the policy of municipal bond insurance or Letter of Credit issued by it in connection with any Series of Bonds) will have been filed with the Trustee, provided such Credit Provider's consent will not be unreasonably withheld. The Indenture may also be amended or supplemented by a Supplemental Indenture upon written consent of each Credit Provider, provided that at the time of the amendment or supplement the payment of the principal and interest on all Outstanding Bonds is insured by a policy or policies of municipal bond insurance or payable under a Letter of Credit issued by a Credit Provider.

No such modification or amendment may:

(1) extend the fixed maturities of the Bonds, or extend the time for making any Minimum Sinking Fund Account Payments, or reduce the rate of interest thereon, or extend the time of payment of interest, or reduce the amount of principal thereof, or reduce any premium payable on the redemption thereof, without the consent of the Owner of each Bond so affected, or

(2) reduce the aforesaid percentage of the Bond Obligation the consent of the Owners of which is required for the execution of any amendment or modification of the Indenture, or

(3) modify any of the rights or obligations of the Trustee without its written consent thereto.

**Modification without Consent of Bondowners or Credit Providers**. The Indenture and the rights and obligations of the Commission and of the Owners of the Bonds may also be modified or amended at any time by a Supplemental Indenture which will become binding upon adoption, without the consent of any Bondowners or any Credit Provider (but with notice to each Credit Provider), but only to the extent permitted by law and only if the Trustee determines, which determination may be based upon a good faith reliance upon an Opinion of Counsel, that the provisions of such Supplemental Indenture will not materially adversely affect the interests of the Owners, including, without limitation, for any one or more of the following purposes-

(1) to add to the covenants and agreements of the Commission in the Indenture other covenants and agreements thereafter to be observed or to surrender any right or power reserved to or conferred upon the Commission by the Indenture;

(2) to cure, correct or supplement any ambiguous or defective provision or omission or mistake contained in the Indenture, or in regard to questions arising under the Indenture, as the Commission may deem necessary or desirable;

(3) to provide for the issuance of additional Series of Bonds, and to provide the terms and conditions under which such additional Series of Bonds may be issued, subject to and in accordance with the provisions of the Indenture; and

(4) to amend the provisions in the Indenture specifying the purposes, in order of priority, for which expenditures can be made from the Revenue Fund for purposes lower in priority than expenditures on the Bonds.

## DEFEASANCE

**Discharge of Indenture**. If the Commission shall pay and discharge the entire indebtedness on all Bonds Outstanding in any one or more of the following ways-

(a) by well and truly paying or causing to be paid the principal of (including redemption premiums, if any) and interest on all Bonds Outstanding, as and when the same become due and payable (but this clause shall not include Bonds the principal of or interest on which has been paid by a Municipal Bond Insurer until said principal and interest shall have been paid by the Commission); or

(b) by depositing with the Trustee, an escrow agent or other fiduciary, in trust, at or before maturity, money which, together with the amounts then on deposit in the Principal Fund, the Interest Fund and the Bond Reserve Fund, is fully sufficient to pay or redeem all Bonds Outstanding, including all principal, interest and redemption premiums, if any; or

(c) by delivering to the Trustee, for cancellation by it, all Bonds Outstanding; or

(d) by depositing with the Trustee, an escrow agent or other fiduciary, in trust, Federal Securities or general obligation bonds of the State of California in such amount which, in the determination of an Independent Certified Public Accountant, who will certify such determination to the Trustee, shall, together with the income or increment to accrue thereon and any other moneys of the Commission made available for such purpose, be fully sufficient to pay and discharge the indebtedness on all Bonds (including all principal, interest and redemption premiums, if any) at or before their respective maturity dates;

and if the Commission shall also pay or causes to be paid all other sums payable under the Indenture by the Commission, including all Policy Costs, then and in that case, at the election of the

Commission (evidenced by a Certificate of the Commission signifying its intention to pay and discharge all such indebtedness, which shall be filed with the Trustee), and notwithstanding that any Bonds shall not have been surrendered for payment, the pledge of the Revenues and other funds provided for in the Indenture and all other obligations of the Commission under the Indenture shall cease, terminate and be completely discharged, except only as described below under "Discharge of Liability on Bonds," and the Owners of the Bonds not so surrendered and paid shall thereafter be entitled to payment only out of the money or Federal Securities or general obligation bonds of the State of California deposited with the Trustee, escrow agent or other fiduciary as aforesaid for their payment, subject, however, to the provisions of the Indenture described below under "Payment of Bonds after Discharge of Indenture." The discharge of the obligations of the Commission under the Indenture shall be without prejudice to the rights of the Trustee to charge for and be reimbursed by the Commission for any expenditures which it may thereafter incur in connection therewith.

**Discharge of Liability on Bonds**. Upon the deposit with the Trustee, an escrow agent or other fiduciary, in trust, at or before maturity, of money or Federal Securities or general obligation bonds of the State of California in the necessary amount to pay or redeem Outstanding Bonds (whether upon or prior to their maturity or the redemption date of such Bonds), provided that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as in the Indenture provided or provision satisfactory to the Trustee shall have been made for the giving of such notice, then all liability of the Commission in respect of such Bonds shall cease, determine and be completely discharged, except only that thereafter the Owners thereof shall be entitled to payment of the principal of and interest on such Bonds by the Commission, and the Commission shall remain liable for such payment, but only out of the money or Federal Securities or general obligation bonds of the State of California deposited in an escrow fund established for this purpose and held by the Trustee, an escrow agent, or other fiduciary, as aforesaid for their payment, subject, however, to the provisions of the Indenture described below under "Payment of Bonds after Discharge of Indenture."

**Payment of Bonds after Discharge of Indenture**. Notwithstanding any provisions of the Indenture, any moneys deposited in trust for the payment of the principal of, or interest or premium on, any Bonds and remaining unclaimed for two years after the principal of all the Outstanding Bonds has become due and payable (whether at maturity or upon call for redemption or by declaration as provided in the Indenture) shall then be repaid to the Commission upon its Written Request, and the Owners of such Bonds shall thereafter be entitled to look only to the Commission for payment thereof, and all liability of the Trustee or any other fiduciary with respect to such moneys will thereupon cease; provided, however, that before the repayment of such moneys to the Commission, as aforesaid, the Trustee may (at the cost of the Commission) first publish at least once in a Financial Newspaper or Journal a notice, in such form as may be deemed appropriate by the Trustee, with respect to the Bonds so payable and not presented and with respect to the provisions relating to the repayment to the Commission, as aforesaid, the Owners of the Bonds in respect of which such moneys were deposited shall thereafter be deemed to be general creditors of the Commission for amounts equivalent to the respective amounts deposited for the payment of such Bonds and so repaid to the Commission (without interest thereon).

## **TRUSTEE PROVISIONS**

The Trustee will, prior to an Event of Default, and after the curing of all Events of Default which may have occurred, perform such duties and only such duties as are specifically set forth in the Indenture. The Trustee will, during the existence of any Event of Default (which has not been cured), exercise such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

So long as there is no Event of Default under the Indenture, the Commission may remove the Trustee, by giving written notice to such Trustee and by giving Bondowners notice by mail, first class postage prepaid, of such removal, and any successor thereto, and may appoint a successor or successors thereto; provided that any such successor will be a bank or trust company doing business and having an office in San Francisco, California, having a combined capital and surplus of at least \$100,000,000, and subject to supervision or examination by federal or state authority. If such bank or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purpose of this Section the

combined capital and surplus of such bank or trust company will be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

The Trustee may at any time resign by giving written notice to the Commission and by giving the Bondowners notice by mail, first class postage prepaid, of such resignation. Upon receiving such notice of resignation, the Commission will promptly appoint a successor Trustee by an instrument in writing. Any resignation or removal of the Trustee and appointment of a successor Trustee will become effective upon acceptance of appointment by the successor Trustee. If no successor Trustee is appointed and accepts appointment within 45 days of giving notice of removal or notice of resignation, the resigning Trustee or any Bondowner (on behalf of himself and all other Bondowners) may petition any court of competent jurisdiction for the appointment of a successor Trustee, and such court may thereupon, after such notice (if any) as it may deem proper, appoint such successor Trustee.

## FIFTH SUPPLEMENTAL INDENTURE

#### AMENDMENTS TO INDENTURE

The Indenture and, the rights and obligations of the Commission and of the Owners of the Bonds and of the Trustee may be modified or amended at any time by a Supplemental Indenture, which will become binding when the written consents of the Owners of a majority in aggregate amount of the Bond Obligation of the Bonds then Outstanding and of each Credit Provider have been filed with the Trustee, and the other requirements contained under the caption "Modification or Amendment of the Indenture" in the Indenture have been satisfied. The following summary is qualified in its entirety by reference to the complete Fifth Supplemental Indenture, a copy of which can be obtained from the Commission.

Effectiveness of the Fifth Supplemental Indenture. In accordance with the Fifth Supplemental Indenture, certain amendments contained therein have become effective and other amendments contained therein will become effective at such time as the requirements contained in the Indenture and the Fifth Supplemental Indenture are satisfied.

## (1) The below amendments to the Indenture have become effective:

# Amendments Relating to the Calculation and Payment of Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service

The definition of "Maximum Annual Debt Service, Annual Debt Service, Debt Service, Average Annual Debt Service" in Section 1.01 of the Indenture has been amended by adding the following final paragraph to the end of the definition of such terms:

For the purpose of calculating Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service, in determining the amount of interest coming due during any twelve-month period ending June 30 on any Series of Bonds that were issued as Build America Bonds, such amount will be reduced by an amount equal to the Refundable Credits the Commission is scheduled to receive during each such twelve-month period ending June 30. If the amount of Refundable Credits received by the Commission for any Series of Bonds that were issued as Build America Bonds is reduced or not received during any twelve-month period ending June 30, the Commission will calculate the amount of interest coming due for the subsequent twelve-month period ending June 30 without deducting an amount equal to the Refundable Credits for the purpose of calculating Maximum Annual Debt Service, Annual Debt Service, Debt Service, and Average Annual Debt Service until the receipt of such Refundable Credits resumes and all prior deficiencies are cured.

Amendments Relating to Deposits into the Interest Fund, Principal Fund, Sinking Fund Accounts, the Bond Reserve Fund and the Reserve Accounts and Refundable Credits.

The following paragraph has been added as the second paragraph of Section 5.02(a) of the Indenture entitled "Establishment and Maintenance of Funds for Revenues; Use and Withdrawal of Revenues – Interest Fund":

All of the Refundable Credits received by the Commission will be deposited promptly upon receipt in the Interest Fund, and such Refundable Credits are irrevocably pledged to the punctual payment of principal of, interest and redemption premium, if any, on the related Series of Bonds, and, unless an Event of Default shall occur under the Indenture and the provisions of the Indenture relating to the application of funds upon acceleration shall apply, the Refundable Credits will not be used for any other purpose while any of such Series of Bonds issued as Build America Bonds remain Outstanding. Pursuant to Section 5451 of the California Government Code, the pledge of the Indenture constitutes a lien on and security interest in the Refundable Credits for the payment of interest on the related Series of Bonds in accordance with the terms thereof and the terms of the Indenture, and will immediately attach and be effective, binding, and enforceable against the Commission, its successors, purchasers of the Refundable Credits, creditors and all others asserting any rights thereto, irrespective of whether such parties have notice of such pledge and without the need for any physical delivery, recordation, filing or further act. Notwithstanding the foregoing deposit and pledge, the Refundable Credits will not be included in the calculation of Revenues for any purpose under the Indenture. Additionally, in calculating the amount that the Treasurer pays to the Trustee for deposit in the Interest Fund, the Treasurer may reduce the payment by the amount of any Refundable Credits on deposit with the Trustee as provided in the paragraph above.

## (2) The below amendments to the Indenture have not become effective:

# Amendments Relating to Deposits into the Interest Fund, Principal Fund, Sinking Fund Accounts, the Bond Reserve Fund and the Reserve Accounts and Refundable Credits.

The following paragraph will replace the first paragraph of Section 5.02(a) of the Indenture entitled "Establishment and Maintenance of Funds for Revenues; Use and Withdrawal of Revenues – Interest Fund":

Interest Fund, Refundable Credits. Following the Effective Date, deposits into the Interest Fund will continue to be made pursuant to the prior provisions of the Indenture until the next succeeding Interest Payment Date. Following such Interest Payment Date, the monthly deposits required with respect to fixed rate indebtedness will cease, and instead, on or before the fifth Business Day prior to each subsequent Interest Payment Date, the Treasurer will pay to the Trustee for deposit in the Interest Fund in an amount equal to the sum of the following: (i) the amount of interest becoming due and payable on the Outstanding Bonds of such Series that are Current Interest Bonds (except for Bonds constituting Variable Rate Indebtedness) on such Interest Payment Date (less any amounts on deposit in such Fund, including, but not limited to, Refundable Credits available to pay such interest, but excluding amounts on deposit which are reserved as capitalized interest to pay interest during any subsequent period), and (ii) one hundred ten percent (110%) of the estimated aggregate amount of interest due on such Interest Payment Date on the Outstanding Bonds of such Series that are Variable Rate Indebtedness (provided, however, that (A) the amount of such deposit into the Interest Fund for any period may be reduced by the amount by which the deposit in the prior period for interest estimated to accrue on Outstanding Variable Rate Indebtedness exceeded the actual amount of interest accrued during that period on said Outstanding Variable Rate Indebtedness, (B) the amount of such deposit into the Interest Fund for any period will be increased by the amount by which the deposit in the prior period for interest estimated to accrue on Outstanding Variable Rate Indebtedness was less than the actual amount of interest accruing during that period on said Outstanding Variable Rate Indebtedness, and (C) the amount of such deposit will be reduced by any Refundable Credits on deposit in the Interest Fund and available to pay interest for such period). No deposit need be made into the Interest Fund if the amount contained therein is at least equal to the interest to become due and payable on the next Interest Payment Date upon all of the Bonds issued under the Indenture and then Outstanding (but excluding any moneys on deposit in the Interest Fund from the proceeds of any Series of Bonds or other source and reserved as capitalized interest to pay interest on any future Interest Payment Dates following said next Interest Payment Date). Moneys in the Interest Fund will be used and withdrawn by the Trustee solely for the purpose of paying the interest on the Bonds as it will become due and payable (including accrued interest on any Bonds purchased or redeemed prior to maturity pursuant to the Indenture).

Section 5.02(b) of the Indenture entitled "Establishment and Maintenance of Funds for Revenues; Use and Withdrawal of Revenues – Principal Fund; Sinking Fund Accounts" will be amended to read as follows:

Following the Effective Date, deposits into the Principal Fund will continue to be made pursuant to the prior provisions of the Indenture until the next succeeding Principal Payment Date. Following such Principal Payment Date, the monthly deposits required with respect to fixed rate indebtedness will cease, and instead, on or before the fifth Business Day prior to each subsequent Principal Payment Date, the Treasurer will pay to the Trustee for deposit in the Principal Fund in an amount equal to the sum of the following: (i) the aggregate amount of Bond Obligation of such Series (less any amounts on deposit in such Fund) becoming due and payable on such Principal Payment Date, plus (ii) the Minimum Sinking Fund Account Payments required to be made with respect to any Term Bonds of such Series on such Principal Payment Date, plus (iii) if any Letter of Credit Agreement has been entered into on a parity with the Bonds, sufficient amounts to pay the obligations of the Commission under such Letter of Credit Agreement due on such Principal Payment Date. If the amounts on deposit in the Principal Fund will be insufficient to make all deposits which are required to be made with respect to any Principal Payment Date, such amounts shall be applied on a Proportionate Basis and in such proportion as said Serial Bonds, said Minimum Sinking Fund Payments for Term Bonds, and said Letter of Credit Agreement obligations shall bear to each other.

Section 5.02(c) of the Indenture entitled "Establishment and Maintenance of Funds for Revenues; Use and Withdrawal of Revenues – Bond Reserve Fund; Reserve Accounts" will be amended to read as follows:

## Bond Reserve Fund; Reserve Accounts.

(a) Following the Effective Date, in the event of a withdrawal from any Reserve Account, the Treasurer will pay to the Trustee for deposit in such Reserve Account, on a *pari passu* basis with transfers to any Reserve Account, on or before the fifth Business Day prior to each Interest Payment Date following such withdrawal, (i) if such Reserve Account is established with respect to fixed rate Bonds only, an amount which if made in two semi-annual installments, and (ii) if such Reserve Account is established with respect to any Variable Rate Bonds, an amount which if made in equal installments over a 12-month period, is sufficient to replenish any prior withdrawal from such Reserve Account so that the balance in such Reserve Account is equal to the Required Reserve with respect to the applicable Series of Bonds (or such larger balance as may be required by any Supplemental Indenture) at the end of such 12-month period.

(b) No deposit need be made into any Reserve Account so long as there will be in such Reserve Account an amount equal to the Required Reserve with respect to such Series of Bonds, or when and if the sum of the amounts contained (excluding all Bond Reserve Fund Policies) therein and in the Interest Fund and in the Principal Fund is at least equal to the sum of the aggregate principal amount of all of the Bonds then Outstanding and all of the interest then due or thereafter to become due on all such Bonds.

The Trustee will establish and hold within the Bond Reserve Fund a Series of 1987 (c) Reserve Account with respect to the Series of 1987 Bonds and a similar account for each additional Series of Bonds issued under the Indenture. With respect to the Series of Bonds (the "Prior Series of Bonds") issued prior to the effective date of the Fifth Supplemental Indenture, each Reserve Account will be funded in an amount equal to fifty percent (50%) of the Maximum Annual Debt Service on the Outstanding Bonds of the Series to which it relates. With respect to the Series of Bonds issued on or after the effective date of the Fifth Supplemental Indenture, the Trustee will establish and hold a Reserve Account for each Series of Additional Bonds issued under the Indenture, if and to the extent required by the Supplemental Indenture pursuant to which that Series of Bonds is issued. Upon the issuance of a Series of Additional Bonds, there will be deposited into the Reserve Account for that Series an amount equal to the Required Reserve, if any, established for that Series of Bonds under the Supplemental Indenture pursuant to which that Series of Bonds is issued. Upon the issuance of a Series of Additional Bonds, the Commission will advise the Trustee of the Required Reserve to be maintained in the Reserve Account for that Series. Unless otherwise provided in the Supplemental Indenture pursuant to which a Series of Bonds is issued, the Reserve Account established with respect to a Series of Bonds will be available only to pay Debt Service on such Series of Bonds, and will not be available to pay Debt Service on any other Series of Bonds.

(d) Subject to paragraph (l) below, moneys in the respective Reserve Accounts within the Bond Reserve Fund will be used and withdrawn by the Trustee solely for the purpose of paying the principal of, Minimum Sinking Fund Account Payments with respect to, and interest on the corresponding Series of Bonds to which such Reserve Account relates (unless otherwise provided in the Supplemental Indenture pursuant to which a Series of Bonds was issued) in the event that no other moneys are available therefor, or for payment or redemption of all of the Bonds of such Series then Outstanding.

(e) Following application of all other funds held in any Reserve Account relating to a Series of Bonds, the Trustee will draw under any Bond Reserve Fund Policy issued with respect to such Series of Bonds, in a timely manner and pursuant to the terms of such Bond Reserve Fund Policy, to the extent necessary in order to obtain sufficient funds on or prior to the date such funds are needed to pay the Bond Obligation of, Minimum Sinking Fund Account Payments with respect to, and interest on such Series of Bonds when due.

(f) If a Bond Reserve Fund Policy satisfies all or a portion of the Required Reserve for any Series of Bonds and a drawing is made on the Bond Reserve Fund Policy, on or before the fifth Business Day prior to each Interest Payment Date following such drawing, the Treasurer will pay to the Trustee or to the Reserve Provider, with notice to the Trustee, (i) if such Bond Reserve Fund Policy is established with respect to fixed rate Bonds only, an amount which if made in two semi-annual installments, and (ii) if such Bond Reserve Fund Policy is established with respect to any Variable Rate Bonds, an amount which if made in equal installments over a 12-month period, is sufficient to repay the aggregate amount of Policy Costs owing with respect to such drawing by the end of such 12-month period. If the Trustee receives such payment, it shall immediately remit the same to the Reserve Provider.

(g) In the event that the Trustee has notice that any payment of principal of or interest on a Bond has been recovered from its Bondowner pursuant to the United States Bankruptcy Code by a trustee in bankruptcy in accordance with the final, nonappealable order of a court having competent jurisdiction, the Trustee, pursuant to the terms of the Bond Reserve Fund Policy, if any, securing the Series of Bonds of which such Bond is a part, will so notify the Reserve Provider and draw on such policy to the lesser of the extent required or the maximum amount of such policy in order to pay to such Bondowners the principal of and interest so recovered.

(h) If and to the extent that more than one Bond Reserve Fund Policy satisfies the portion of the Required Reserve relating to a Series of Bonds, drawings under such Bond Reserve Fund Policies and payment of Policy Costs with respect to such Bond Reserve Fund Policies shall be made on a pro rata basis (calculated by reference to the maximum amounts of such Bond Reserve Fund Policies).

(i) If a Bond Reserve Fund Policy is deposited in a Reserve Account in which cash has been previously deposited in satisfaction of the Required Reserve for the applicable Series of Bonds, the trustee shall release cash from that Reserve Account in an amount equal to the Bond Reserve Fund Policy being deposited, and shall transfer the cash so released to the Commission to be used for any lawful purpose, *provided, however*, that the Commission shall ensure that the use of any cash so released will not adversely affect the exclusion from gross income of the interest on the Bonds under Section 103 of the Code.

(j) If deposits are insufficient to fully satisfy the requirements of paragraph (e) above, deposits to the Bond Reserve Fund shall be applied on a pro rata basis to the respective Reserve Accounts, calculated by reference to the amounts required to be maintained in each Reserve Account, and within any Reserve Account first to the pro rata payment of Policy Costs and upon satisfaction of such Policy Costs to satisfying any portion of the Required Reserve to be maintained within such Reserve Account not covered by a Bond Reserve Fund Policy.

(k) So long as the Commission is not in default under the Indenture, and in each Reserve Account there is a balance equal to the Required Reserve for the Series of Bonds for which such Reserve Account was established, any amount in the Bond Reserve Fund in excess of the Required Reserve will be withdrawn semiannually, on May 1 and November 1 of each year, by the Trustee from the Bond Reserve Fund and transferred to the Treasurer for deposit in the Revenue Fund or, during the period of construction of the Project or any portion thereof, the Improvement Fund. Notwithstanding the foregoing, the Commission will have the right to withdraw excess amounts on deposit in the Bond Reserve Fund at any time upon request to the Trustee.

(1) On and after the Effective Date, any Reserve Requirement established with respect to any Series of Bonds which are issued as Build America Bonds prior to such date may, at the option of the Commission, be recalculated in accordance with the provisions of the Fifth Supplemental Indenture.

(m) Nothing under the Indenture shall preclude the creation of a Reserve Account to secure one or more Series of Bonds issued subsequent to the Effective Date.

#### Amendments Relating to the Required Reserve.

The definition of "Required Reserve" will be amended to read as follows:

The term "Required Reserve" means (1) with respect to a Series of Bonds issued prior to the Effective Date, the aggregate amount which is equal to the sum of fifty percent (50%) of the Maximum Annual Debt Service on such Series of Bonds then Outstanding; provided, however, that such Required Reserve or a portion thereof may be provided by one or more Bond Reserve Fund Policies; provided further that in no event shall the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit; and (2) with respect to a Series of Bonds issued on or after the Effective Date, as of any date of calculation, the amount, if any, required to be deposited into a Reserve Account for that Series of Bonds, as defined in and provided by the Supplemental Indenture pursuant to which such Series of Bonds is issued; provided, however, that in no event shall the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount, if any, required to be deposited into a Reserve Fund which Series of Bonds is issued; provided, however, that in no event shall the Commission, in connection with issuance of a Series of Additional Bonds, be obligated to deposit an amount in the Bond Reserve Fund which is in excess of the amount permitted by the applicable provisions of the Code to be so deposited from the proceeds of tax-exempt bonds without having to restrict the yield of any investment purchased with any portion of such deposit.

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## **APPENDIX B**

## SUMMARIES OF CERTAIN LOCAL INITIATIVES (PROPOSITIONS A, E AND P)

# Proposition A – Issuance of \$1.6 Billion in Revenue Bonds for Capital Improvements to the City's Water System. November 5, 2002

On November 5, 2002, voters of the City approved the issuance of revenue bonds pursuant to Charter Section 9.107, without voter approval, in a principal amount not to exceed \$1,628,000,000, to finance the acquisition and construction of improvements to the City's water system.

# Proposition E – Alternative Method for Issuing Revenue Bonds/Establishment of Rate Fairness Board

*Authority to Issue Revenue Bonds.* Proposition E, approved by San Francisco voters on November 5, 2002, which has been incorporated into the San Francisco Charter as Sections 8B.120 – 8B.127, provides for additional authority for the SFPUC to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors of the City, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities or combinations of water and clean water facilities under the jurisdiction of the SFPUC. Proposition E authorizes the Board of Supervisors to take any and all actions necessary to authorize, issue and repay such revenue bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds. Issuance of such revenue bonds is subject to the following additional conditions set forth in Proposition E:

Notwithstanding any other provision of the Charter or of any ordinance of the City and County, the Board of Supervisors may take any and all actions necessary to authorize, issue and repay such bonds, including, but not limited to, modifying schedules of rates and charges to provide for the payment and retirement of such bonds, subject to the following conditions:

(a) Certification by an independent engineer retained by the SFPUC that:

(1) the projects to be financed by the bonds, including the prioritization, cost estimates and scheduling, meet utility standards; and

(2) estimated net revenue after payment of operating and maintenance expenses will be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service on the bonds to be issued, and estimated repair and replacement costs.

(b) Certification by the San Francisco Planning Department that facilities under the jurisdiction of the SFPUC funded with such bonds will comply with applicable requirements of the California Environmental Quality Act.

**Setting Water Rates.** The SFPUC is required under Proposition E to set rates, fees and other charges in connection with providing the utility services under its jurisdiction, subject to rejection — within thirty days of submission — by resolution of the Board of Supervisors. If the Board of Supervisors fails to act within thirty days the rates will become effective without further action.

Under Proposition E, in setting retail rates, fees and charges (for water and for the sewer and power utility services it provides) the SFPUC is required to take the following actions:

1. Establish rates, fees and charges at levels sufficient to improve or maintain financial condition and bond ratings at or above levels equivalent to highly rated utilities of each enterprise under its jurisdiction, meet requirements and covenants under all bond resolutions and indentures, (including, without limitation, increases necessary to pay for the Retail Customers' share of the debt service on bonds and operating expenses of any state financing authority such as the Regional Water System Financing Authority), and provide sufficient resources for

the continued financial health (including appropriate reserves), operation, maintenance and repair of each enterprise, consistent with good utility practice;

2. Retain an independent rate consultant to conduct rate and cost of service studies for each utility at least every five years;

3. Set retail rates, fees and charges based on the cost of service;

4. Conduct all studies mandated by applicable state and federal law to consider implementing connection fees for water and clean water facilities servicing new development;

5. Conduct studies of rate-based conservation incentives and/or lifeline rates and similar rate structures to provide assistance to low income users, and take the results of such studies into account when establishing rates, fees and charges, in accordance with applicable state and federal laws;

6. Adopt annually a rolling 5-year forecast of rates, fees and other charges; and

7. Establish a Rate Fairness Board.

*Rate Fairness Board*. Proposition E also directed the establishment of a Rate Fairness Board to advise the SFPUC on water and sewer rate matters. These provisions went into effect on July 1, 2006, with respect to water rates. Specific duties for the Rate Fairness Board include:

- annual review of a five-year rate forecast;
- hold one or more public hearings on annual rate recommendations before the SFPUC adopts rates;
- provide a report and recommendations to the SFPUC on the rate proposal; and,
- in connection with periodic rate studies, submit to the SFPUC rate policy recommendations for the SFPUC's consideration, including recommendations to reallocate costs among various retail utility customer classifications, subject to any outstanding bond requirements.

*Effective Date.* Proposition E was effective as of July 2, 2006 with respect to the Water Enterprise, following the expiration of Proposition H, which the electorate of the City approved in June 1998 and which, subject to certain exceptions (including a limited exception to raise rates to pay debt service on voter-approved debt), froze the SFPUC's water rates through July 1, 2006.

## **Proposition P – Revenue Bond Oversight Committee**

On November 5, 2002, the voters of San Francisco adopted Proposition P, an ordinance that established the "Public Utilities Revenue Bond Oversight Committee" ("RBOC"). The ordinance, which has been incorporated into the San Francisco Administrative Code as Chapter 5, Article V, Sections 5A.30 - 5A.36, set forth the authority, duties and responsibilities of the RBOC, and established qualifications for Rate Fairness Board membership and related provisions.

Under Proposition P, the RBOC sunsets in 2013, unless extended by the Board. The Commission has approved an extension of the RBOC's term, which is anticipated to be considered by, but has not yet been approved by, the Board of Supervisors.

In accordance with the provisions of Proposition P, to the extent permitted by law, one-twentieth of one percent of the gross proceeds of the SFPUC's Water Revenue Bonds (the "Bonds") shall be deposited in a fund established by the Controller's Office and appropriated by the Board at the direction of the RBOC established by Proposition P to cover the costs of said committee; provided that any amounts so paid from the proceeds of Bonds that have not been spent by the RBOC in connection with such Bonds (as contemplated by Article 5A.31(c) of the Administrative Code) within 36 months of the date of issuance of such Bonds shall be returned to the SFPUC for deposit into the Improvement Fund (as such term is defined in the Indenture) and expended by the SFPUC to acquire and construct improvements.

## **APPENDIX C**

#### SUMMARY OF CERTAIN PROVISIONS OF THE WATER SUPPLY AGREEMENT

The following brief summary of certain provisions of the Water Supply Agreement is subject in all respects to all of the provisions of such document. This brief summary does not purport to be a complete statement of said provisions and prospective purchasers of the 2012 Series ABC Bonds are referred to the complete text of said document.

## DEFINITIONS

## Definitions

"**1984 Agreement**" refers to the 1984 Settlement Agreement and Master Water Sales Contract between the City and County of San Francisco and certain Suburban Purchasers in San Mateo County, Santa Clara County and Alameda County, which expired on June 30, 2009.

"Act" refers to the Raker Act, 38 Stat. 242, the Act of Congress, enacted in 1913, that authorized the construction of the Hetch Hetchy system on federal lands.

"Adjusted Proportional Annual Use" means the respective percentages of annual water use, as adjusted to reflect deliveries of water by the Hetch Hetchy Water & Power Project to outside City Retail Customers.

"Agreement" refers to the Water Supply Agreement, by and among San Francisco and the Wholesale Customers who approve the Agreement.

"**BAWSCA**" refers to the Bay Area Water Supply and Conservation Agency established pursuant to Division 31 of the California Water Code (Water Code §§81300-81461) or its successor and permitted assigns.

"**CEQA**" refers to the California Environmental Quality Act found at §§21000 et seq. of the Public Resources Code and the Guidelines for the California Environmental Quality Act found at §§15000 et seq. of Title 14 of the California Code of Regulations, as amended from time to time.

"Commission" means the governing board of the SFPUC.

"**Debt Service**" means principal and interest paid during a fiscal year on Indebtedness incurred by the SFPUC for the 2006 Revenue Bonds, Series A, and subsequently issued Indebtedness (exclusive of 2006 Revenue Bonds, Series B and C), the proceeds of which are used or are scheduled to be used for the acquisition or construction of New Regional Assets or to refund such Indebtedness.

"Direct Retail" refers to Regional Water System capital or operating expenditures that are incurred to provide water service solely to Retail Customers.

"Direct Wholesale" refers to Regional Water System capital or operating expenditures that are incurred to provide water service solely to one or more Wholesale Customers.

"**Drought**" means a water shortage caused by lack of precipitation, as reflected in resolutions of the Commission calling for voluntary or mandatory water rationing based on evaluation of water stored or otherwise available to the Regional Water System, whether or not the Commission declares a water shortage emergency pursuant to Water Code §§ 350 et seq., as amended from time to time.

"Emergency" means a sudden, non-drought event, such as an earthquake, failure of Regional Water System infrastructure or other catastrophic event or natural disaster that results in an insufficient supply of water available to the Retail or Wholesale Service Areas for basic human consumption, firefighting, sanitation, and fire protection. "Encumbrance" or "Encumber" refers to the process by which the City Controller certifies the availability of amounts previously appropriated by the Commission for specifically identified SFPUC capital projects performed either by third parties or through work orders to other San Francisco departments.

"Environmental Enhancement Surcharge" means the surcharge to be imposed by the SFPUC on individual parties to the Agreement whose use exceeds their Interim Supply Allocation when the collective use of water by all parties to the Agreement is in excess of the Interim Supply Limitation.

"Excess Use Charges" are monthly charges set by the SFPUC, in the form of multipliers, that are applied to the Wholesale Customer water rates during times of mandatory rationing if a Wholesale Customer's water usage is greater than its shortage allocation.

"Existing Assets" refers to Regional and Hetch Hetchy Water-Only and Water-Related capital assets plant in service as of June 30, 2009.

"Fundamental Rights" of Wholesale Customers are their status as parties to the Agreement, their allocation of water recognized in the Agreement, their protection against arbitrary, unreasonable, or unjustly discriminatory rates and any other specific rights described in the Agreement.

"Hetch Hetchy Enterprise" refers to Hetch Hetchy Water and Power Enterprise, a SFPUC operating department.

"Indebtedness" includes revenue bonds, bond anticipation notes, certificates of participation (excluding certificates of participation towards which SFPUC contributes debt service as an operating expense), and commercial paper.

"Individual Water Sales Contract" refers to the contracts between each Wholesale Customer and San Francisco that details customer-specific matters such as location of service connections, service area maps and other matters specific to that customer.

"Individual Supply Guarantee" refers to each Wholesale Customer's share of the Supply Assurance.

"Interim Supply Allocation" refers to each Wholesale Customer's share, to be established by the SFPUC of the Interim Supply Limitation.

"Interim Supply Limitation" refers to the 265 MGD annual average limitation on water deliveries until December 31, 2018 from Regional Water System watersheds imposed by the SFPUC in its approval of the WSIP in Resolution Number 08-0200 dated October 30, 2008.

"Joint," when used in connection with Hetch Hetchy Enterprise assets or expenses, refers to assets used or expenses incurred in providing both water supply ("Water-Related") and in the generation and transmission of electrical energy ("Power-Related").

"Local System Water" refers to Regional Water System water supplies developed in San Mateo, Alameda and Santa Clara Counties or otherwise not produced by the Hetch Hetchy Enterprise under rights of way granted by the Act.

"**MGD**" refers to an average flow rate of one million gallons per day over a specific time period, often a year. For example, one MGD is equal to 365 million gallons per year or 1,120 acre feet per year.

"Net Annual Debt Service" refers to debt service less payments made from proceeds of Indebtedness (e.g., capitalized interest), earnings on bond proceeds (e.g., reserve fund earnings) used to pay Debt Service, and interest paid from renewed commercial paper, or from reserve fund liquidation.

"New Assets" refers to Regional and Hetch Hetchy Water-Only and Water-Related capital assets added to Regional Water System plant in service after June 30, 2009.

"New Regional Assets" refers to New Assets placed in service on or after July 1, 2009 that are used and useful in delivering water to Wholesale Customers. The following four categories comprise New Regional Assets:

- 1. Water Enterprise Regional Assets
- 2. Water Enterprise Direct Wholesale Assets
- 3. Hetch Hetchy Water Only Assets
- 4. Water-Related portion (45 percent) of Hetch Hetchy Joint Assets

"**Power-Only**," when used with reference to Hetch Hetchy Enterprise capital costs and operating and maintenance expenses, means capital costs and expenses that are incurred solely for the construction and operation of assets used to generate and transmit electrical energy.

"Power-Related" refers to the power related portion (55%) of Joint Hetch Hetchy Enterprise assets or expenses.

"**Proportional Annual Use**" means the shares of deliveries from the Regional Water System used by City Retail Customers and by the Wholesale Customers in a fiscal year, expressed as a percentage.

"**Proportional Water Use**" refers the general principle of allocating Regional Water System costs based on the relative purchases of water by Retail and Wholesale Customers.

"**Regional**," when used with reference to Water Enterprise capital assets and operating expenses, refers to assets and expenses that benefit Wholesale and Regional Customers.

"**Regional Water System**" means the water storage, transmission and treatment system operated by the SFPUC in Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco counties, including projects constructed under the WSIP, but excluding Direct Retail and Direct Wholesale assets.

"**Retail Customers**" means any customer that purchases water from San Francisco that is not a Wholesale Customer, whether located inside or outside of San Francisco.

"Retail Service Area" means the areas where SFPUC sells water to Retail Customers.

"Retail Water" means water sold by the SFPUC to its Retail Customers within and outside San Francisco.

"San Francisco" refers to the City and County of San Francisco.

"SFPUC" refers to the San Francisco Public Utilities Commission as an operating department of San Francisco, the General Manager of which reports to the Commission.

"**Substantially Expended**," when used with respect to a specific bond issue, means 98% of the proceeds from that bond issue and investment earnings contributed to the project fund have been expended.

"Supply Assurance" means the 184 MGD maximum annual average metered supply of water dedicated by San Francisco to public use in the Wholesale Service Area (not including San Jose and Santa Clara).

"**Term**" means the 25-year term of the Agreement commencing July 1, 2009, including one or both 5-year extensions authorized by the Agreement.

"Tier 1 Shortage Plan" refers to the Water Shortage Allocation Plan, adopted by the SFPUC and the Wholesale Customers in conjunction with the Agreement describing the method for allocating water between the

SFPUC and the Wholesale Customers collectively for shortages of up to 20% of deliveries from the Regional Water System, as amended from time-to-time.

"Water Enterprise" refers to the San Francisco Water Department (SFWD), an SFPUC Operating Department.

"Water Management Charge" refers to the charge collected by San Francisco on behalf of BAWSCA for local water resource development in the Wholesale Service Area.

"Water-Only," when used with reference to Hetch Hetchy Enterprise capital costs and operating and maintenance expenses, means capital costs and expenses that are incurred solely for the construction and operation of assets used to protect water quality or to provide for the delivery of water for consumptive purposes.

"Water-Related" refers to the water related portion (45%) of Joint Hetch Hetchy Enterprise assets or expenses.

"Wheeling Statute" refers to Article 4 of Chapter 11 of the California Water Code, as amended from time to time.

"Wholesale Capital Fund" is the account established by the SFPUC for deposit of Wholesale Customer revenue that is used to fund the wholesale share of revenue-funded New Regional Assets.

"Wholesale Customer" or "Customers" means one or more of the 27 water customers that are contracting for purchase of water from San Francisco pursuant to the Agreement.

"Wholesale Revenue Coverage" refers to the additional dollar amount included in wholesale rates each fiscal year that is charged to Wholesale Customers by the SFPUC for their proportionate share of Debt Service coverage.

"Wholesale Revenue Coverage Reserve" refers to the account established by the SFPUC for deposit of Wholesale Revenue Coverage.

"Wholesale Revenue Requirement" means the calculated Wholesale Customer portion of SFPUC Regional Water System capital and operating costs.

"Wholesale Service Area" means the combined service areas of the Wholesale Customers, as delineated on the service area maps attached to each Individual Water Sales Contract.

"WSIP" refers to the Water System Improvement Program approved by the Commission in Resolution No. 08-0200 on October 30, 2008, as amended from time to time.

## Term

The Term of the Agreement shall be twenty five (25) years. The Term shall begin on July 1, 2009 and shall end on June 30, 2034.

In December 2031, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of the Agreement. Between January 1, 2032 and June 30, 2032, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2032 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2030-31, the Term shall be extended for another five (5) years ("First Extension Term"), through June 30, 2039. No party to the Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties.

In December 2036, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of the Agreement. Between January 1, 2037 and June 30, 2037, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2037 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2035-36, the Term shall be extended for another five (5) years ("Second Extension Term"), through June 30, 2044. No party to the Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties.

#### Amendments to Agreement

The Agreement may be amended with the written consent of San Francisco and of Wholesale Customers representing at least two-thirds in number and seventy five percent (75%) of the quantity of water delivered by San Francisco to all Wholesale Customers during the fiscal year immediately preceding the amendment.

No amendment which adversely affects a Fundamental Right of a Wholesale Customer may be made without the written consent of that customer.

#### **Supply Assurance**

San Francisco agrees to deliver water to the Wholesale Customers up to the amount of the Supply Assurance. Water delivered by San Francisco to Retail Customers shall not be included in the Supply Assurance. Until December 31, 2018, such commitment is subject to the Interim Supply Limitation provisions in the Agreement.

Both the Supply Assurance and the Individual Supply Guarantees identified are expressed in terms of daily deliveries on an annual average basis and do not themselves constitute a guarantee by San Francisco to meet peak daily or hourly demands of the Wholesale Customers, irrespective of what those peak demands may be. The parties acknowledge, however, that the Regional Water System has been designed and constructed to meet peak daily and hourly demands and that its capacity to do so has not yet been reached. San Francisco agrees to operate the Regional Water System to meet peak requirements of the Wholesale Customers to the extent possible without adversely affecting its ability to meet peak demands of Retail Customers. The Agreement shall not preclude San Francisco from undertaking to meet specific peak demand requirements of individual Wholesale Customers in their Individual Water Sales Contracts.

The Supply Assurance is perpetual and shall survive the expiration or earlier termination of the Agreement. Similarly, the Individual Supply Guarantees and/or the Individual Water Sales Contracts are perpetual and shall survive the expiration or earlier termination of the Agreement or the Individual Water Sales Contracts.

The amount of water made available by San Francisco to the Wholesale Customers is subject to reduction, to the extent and for the period made necessary by reason of water shortage, Drought, Emergencies, or by malfunctioning or rehabilitation of facilities in the Regional Water System. The amount of water made available to the Wholesale Customers may not be reduced, however, merely because the water recycling and groundwater projects which WSIP envisions to be constructed within San Francisco, or the conservation programs intended to reduce water use by Retail Customers that are included in the WSIP, do not generate the yield or savings (10 MGD combined) anticipated by San Francisco.

#### **Allocation of Supply Assurance**

A portion of the Supply Assurance has been allocated among 24 of the 27 Wholesale Customers. Three Wholesale Customers do not have Individual Supply Guarantees. The cities of San Jose and Santa Clara do not have an Individual Supply Guarantee because San Francisco has provided water to them on a temporary and interruptible basis. The City of Hayward does not have an Individual Supply Guarantee because of the terms of the 1962 contract between it and San Francisco.

If the total amount of water delivered by San Francisco to Hayward and to the Wholesale Customers with Individual Supply Guarantees exceeds 184 MGD over a period of three consecutive fiscal years (i.e., July 1 through June 30), then the Individual Supply Guarantees of those Wholesale Customers shall be reduced pro rata so that their combined entitlement and the sustained use by Hayward does not exceed 184 MGD.

It shall be the responsibility of each Wholesale Customer to limit its purchases of water from San Francisco so as to remain within its Individual Supply Guarantee. San Francisco shall not be liable to any Wholesale Customer or be obligated to supply more water to any Wholesale Customer individually or to the Wholesale Customers collectively than the amount to which it or they are otherwise entitled under the Agreement due to the use by any Wholesale Customer of more water than the amount to which it is entitled under the Agreement.

San Francisco shall install such new connections between the Regional Water System and the distribution system of any Wholesale Customer that are necessary to deliver the quantities of water to which the Wholesale Customer is entitled under the Agreement. San Francisco shall have the right to determine the location of such connections, in light of the need to maintain the structural integrity of the Regional Water System and, where applicable, the need to limit peaking directly off of Regional Water System pipelines by a Wholesale Customer's individual retail customers, the need to ensure that a Wholesale Customer's individual retail customers have access to alternative sources of water in the event of a reduction in San Francisco's ability to provide them with water, and other factors which may affect the desirability or undesirability of a particular location.

## Wholesale Customer Service Areas

A Wholesale Customer may not deliver water furnished to it by San Francisco outside the boundary of its service area without the prior written consent of San Francisco, except for deliveries to another Wholesale Customer on an emergency and temporary basis. San Francisco may refuse a Wholesale Customer's request to expand its service area on any reasonable basis.

If two or more Wholesale Customers agree to adjust the boundaries of their respective service areas so that one assumes an obligation to serve customers in an area that was previously within the service area of another Wholesale Customer, they may also correspondingly adjust their respective Individual Supply Guarantees.

San Francisco acknowledges that it has heretofore consented in writing to deliveries of water by individual Wholesale Customers outside their service area boundaries and agrees that nothing in the Agreement is intended to affect such prior authorizations, which remain in full force and effect according to their terms.

## Permanent Transfers of Individual Supply Guarantees

A Wholesale Customer that has an Individual Supply Guarantee may transfer a portion of it to one or more other Wholesale Customers; transfers of a portion of an Individual Supply Guarantee must be permanent; and transfers of portions of Individual Supply Guarantees are subject to approval by the SFPUC. SFPUC review is limited to (1) whether a proposed transfer complies with the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee.

## **Restrictions on Resale**

Each Wholesale Customer agrees that it will not sell any water purchased from San Francisco to a private party for resale by such private party to others in violation of the Act.

Each Wholesale Customer also agrees that it will not sell water purchased from San Francisco to another Wholesale Customer without prior written approval of the SFPUC, except on a temporary and emergency basis. The SFPUC agrees that it will not unreasonably withhold its consent to a request by a Wholesale Customer to deliver water to another Wholesale Customer for resale.

## **Conservation; Use of Local Sources**

Each Wholesale Customer shall take all actions within its legal authority related to water conservation that are necessary to insure that the SFPUC (a) remains eligible for (i) state and federal grants and (ii) access to the Drought Water Bank operated by the California Department of Water Resources, as well as other Drought-related water purchase or transfer programs, and (b) complies with future legal requirements imposed on the Regional Water System by the federal government, the State, or any other third party as conditions for receiving funding or water supply.

San Francisco and each Wholesale Customer agree that they will diligently apply their best efforts to use both surface water and groundwater sources located within their respective service areas and available recycled water to the maximum feasible extent, taking into account the environmental impacts, the public health effects and the effects on supply reliability of such use, as well as the cost of developing such sources.

#### **Restrictions on Purchases of Water from Others; Minimum Annual Purchases**

Each Wholesale Customer (except for Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale) agrees that it will not contract for, purchase or receive, with or without compensation, directly or indirectly, from any person, corporation, governmental agency or other entity, any water for delivery or use within its service area without the prior written consent of San Francisco.

The prohibition in the preceding sentence does not apply to:

1. recycled water;

2. water necessary on an emergency and temporary basis, provided that the Wholesale Customer promptly gives San Francisco notice of the nature of the emergency, the amount of water that has been or is to be purchased, and the expected duration of the emergency; or

3. water in excess of a Wholesale Customer's Individual Supply Guarantee.

Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale may purchase water from sources other than San Francisco, provided that San Francisco shall require that each purchase a minimum annual quantity of water from San Francisco.

#### Water Quality

San Francisco shall deliver treated water to Wholesale Customers (except Coastside County Water District, which receives untreated water from Crystal Springs and Pilarcitos Reservoirs) that complies with primary maximum contaminant level and treatment technique standards at the regulatory entry points designated in the San Francisco Regional Water System Domestic Water Supply Permit (currently Permit No. 02-04-04P3810001) issued by the California Department of Public Health.

#### **Completion of WSIP**

San Francisco will complete construction of the physical facilities in the WSIP by December 31, 2015. The SFPUC agrees to provide for full public review and comment by local and state interests of any proposed changes that delay previously adopted project completion dates or that delete projects. The SFPUC shall meet and consult with BAWSCA before proposing to the Commission any changes in the scope of WSIP projects which reduce their capacity or ability to achieve adopted levels of service goals. The SFPUC retains discretion to determine whether to approve the physical facilities in the WSIP until after it completes the CEQA process.

## **Regional Water System Repair, Maintenance and Operation**

San Francisco will keep the Regional Water System in good working order and repair consistent with prudent utility practice.

San Francisco will continue to operate its reservoirs in a manner that assigns higher priority to the delivery of water to the Bay Area and the environment than to the generation of electric power. The SFPUC, as the Regional Water System operator, is solely responsible for making day-to-day operational decisions.

#### Shortages

Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers individually, San Francisco may reduce the amount of water available or interrupt water deliveries to specific geographical areas within the Regional Water System service area to the extent that such reductions are necessary due to Emergencies, or in order to install, repair, rehabilitate, replace, investigate or inspect equipment in, or perform other maintenance work on, the Regional Water System. Such reductions or interruptions may be imposed by San Francisco without corresponding reductions or interruptions in the amount of water available to SFPUC water users outside the specific geographical area where reductions or interruptions are necessary, if the system's ability to supply water outside the specific geographical area has not been impaired. In the event of such a reduction or interruption, San Francisco will restore the supply of water to the specific geographical area as soon as is possible.

Following a major system emergency event, the SFPUC will work closely with its Wholesale Customers to monitor customer demand, including the demand source. In the event that any individual Wholesale Service Area or Retail Service Area customer's uncontrolled distribution system leaks could result in major water waste and endanger the supply provided by the Regional Water System as a whole, flow through some customer connections may need to be temporarily reduced or terminated. SFPUC will work closely with customers to assess the nature of the demand (e.g. fire-fighting versus leakage), so that public health and safety protection can be given top priority.

1. All emergencies that require use of non-potable source water will require use of chlorine, or other suitable disinfectant, if feasible.

2. San Francisco will use its best efforts to meet the seismic reliability and delivery reliability level of service goals adopted by the Commission in conjunction with the WSIP. San Francisco will distribute water on an equitable basis throughout the Regional Water System service area following a regional Emergency, subject to physical limitations caused by damage to the Regional Water System.

Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers individually, San Francisco may reduce the amount of water available to the Wholesale Customers in response to Drought.

1. The Tier 1 Shortage Plan set forth in the Agreement will continue to be used to allocate water from the Regional Water System between Retail and Wholesale Customers during system-wide shortages of 20% or less.

2. San Francisco and the Wholesale Customers may negotiate in good faith revisions to the Tier 1 Shortage Plan to adjust for and accommodate anticipated changes due to demand hardening in the SFPUC's Wholesale and Retail Service Areas. Until agreement is reached, the current Tier 1 Shortage Plan will remain in effect.

3. The SFPUC will honor allocations of water among the Wholesale Customers ("Tier 2 Allocations") provided by BAWSCA or if unanimously agreed to by all Wholesale Customers. If BAWSCA or all Wholesale Customers do not provide the SFPUC with Tier 2 Allocations, then the SFPUC may make a final allocation decision after first meeting and discussing allocations with BAWSCA and the Wholesale Customers. For Regional Water System shortages in excess of 20%, San Francisco shall (a) follow the Tier 1 Shortage Plan allocations up to the 20% reduction, (b) meet and discuss how to implement incremental reductions above 20% with the Wholesale Customers, and (c) make a final determination of allocations above the 20% reduction. After the SFPUC has made the final allocation decision, the Wholesale Customers shall be free to challenge the allocation on any applicable legal or equitable basis.

4. San Francisco will use its best efforts to identify potential sources of dry year water supplies and establish the contractual and other means to access and deliver those supplies in sufficient quantity to meet a goal of not more than 20% system-wide shortage in any year of the design drought.

## Wheeling of Water from Outside SFPUC System

Subject to the Wheeling Statute, the SFPUC will not deny use of Regional Water System unused capacity for wheeling when such capacity is available for wheeling purposes during periods when the SFPUC has declared a water shortage emergency under Water Code Section 350 if the following conditions are met:

A. The transferor pays reasonable charges incurred by the SFPUC as a result of the wheeling, including capital, operation, maintenance, administrative and replacement costs (as such are defined in the Wheeling Statute).

B. Wheeled water that is stored in the Regional Water System spills first.

C. Wheeled water will not unreasonably: (1) impact fish and wildlife resources in Regional Water System reservoirs; (2) diminish the quality of water delivered for consumptive uses; or (3) increase the risk of exotic species impairing Regional Water System operations. The transferor may at its own expense provide for treatment to mitigate these effects.

D. Priority will be given to wheeling by Wholesale Customers or BAWSCA over arrangements for third-party public entities.

## Limits on New Customers

Until December 31, 2018, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations;

2. It concurrently completes any necessary environmental review under CEQA and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD; and

3. The Agreement is amended to incorporate any commitments to proposed new wholesale customers and to San Jose and Santa Clara, and to address the effects, if any, of the new customer(s) on water supply reliability, water quality and cost to existing customers of the Regional Water System.

As of January 1, 2019, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations;

2. It concurrently completes any necessary environmental review under CEQA and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD;

3. Doing so increases the reliability of the Regional Water System; and

4. The Agreement is concurrently amended (a) to reflect that increased reliability by means of an increased commitment by San Francisco to deliver water during Droughts and (b) to address the effects, if any, of the new customer(s) on water supply, water quality and cost to existing customers of the Regional Water System.

San Francisco may enter into new retail water service obligations outside of the City and County of San Francisco:

1. Only in Alameda, San Mateo, Santa Clara, San Joaquin and Tuolumne Counties;

2. That are within or immediately adjacent to areas in which it currently serves other Retail Customers; and

- 0.5 MGD.
- 3. Until the aggregate additional demand represented by the new retail customers reaches

The limitations on serving new Retail Customers described in this subsection do not apply to historical obligations to supply water that may be contained in prior agreements between the SFPUC or its predecessor the Spring Valley Water Company, and individual users or property owners located adjacent to Regional Water System transmission pipelines.

Subject to completion of necessary environmental review under CEQA, San Francisco may at any time enter into water exchanges or cost sharing agreements with other water suppliers to enhance dry year or normal year water deliveries, provided that San Francisco cannot incur new water service obligations to such other water suppliers unless the requirements for taking on new wholesale customers are met.

# New Sources of Water Supply to Maintain Supply Assurance

Sudden and unanticipated events may require San Francisco to act promptly to protect the health, safety and economic well-being of its Retail and Wholesale Customers. Such sudden events include, but are not limited to drought, earthquakes, terrorist acts, catastrophic failures of facilities owned and operated by San Francisco, and other natural or man-made events. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers.

Climate change, regulatory actions and other events may impact San Francisco's ability to maintain the Supply Assurance from its existing surface water supplies, but on timescales long enough to permit San Francisco to collaborate with its Wholesale Customers on how best to address possible impacts to water supply. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers.

## New Sources of Water Supply to Increase Supply Assurance

The Commission action in SFPUC Resolution Number 08-0200, adopted October 30, 2008 requires certain decisions by San Francisco regarding whether to supply more than 265 MGD from its watersheds following 2018. Such decisions are to be made by December 31, 2018, subject to the exercise of San Francisco's retained CEQA discretion. San Francisco's future decisions may include an offer to increase the Supply Assurance at the request of some or all of its Wholesale Customers. Costs associated with providing additional water from its existing water supplies in San Mateo, Santa Clara, Alameda, Tuolumne, and Stanislaus Counties shall be allocated to Wholesale and Retail Customers as described in the Agreement.

If San Francisco seeks to develop additional water supplies from new sources to increase the Supply Assurance available to Wholesale Customers, studies and resulting water supply projects will be conducted jointly with BAWSCA under separate agreement(s) specifying the purpose of the projects, the anticipated regional benefits and how costs of studies and implementation will be allocated and charged. Nothing in the Agreement shall serve as precedent for the allocation of such new supply capital costs between Retail and Wholesale Customers or associated operational expenses, which shall only occur following approval of both parties and amendment of the Agreement, if necessary.

## **Interim Supply Limitation Imposed by SFPUC**

In adopting the WSIP in Res. No. 08-0200, the Commission included full implementation of all proposed WSIP capital improvement projects to achieve level of service goals relating to public health, seismic safety, and delivery reliability, but decided to adopt a water supply element that includes the Interim Supply Limitation. Between the Effective Date and December 31, 2018, the Interim Supply Limitation is allocated as follows between Retail and Wholesale Customers:

Retail Customers' allocation:	81 MGD
Wholesale Customers' allocation:	184 MGD

The Wholesale Customers' collective allocation of 184 MGD under the Interim Supply Limitation includes the demand of the cities of San Jose and Santa Clara, whose demand is not included in the Supply Assurance.

## **Transfers of Interim Supply Allocations**

Any Wholesale Customer, including Hayward, may transfer a portion of its Interim Supply Allocation to one or more other Wholesale Customers. All Wholesale Customers are also eligible transferees, including California Water Service Company up to its Individual Supply Guarantee. Transfers of a portion of an Interim Supply Allocation must be prospective. The duration of a transfer cannot be less than the balance of the fiscal year. Transfers of portions of Interim Supply Allocations are subject to approval by the SFPUC. SFPUC review is limited to determining (1) whether a proposed transfer complies with the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee. The SFPUC will not unreasonably withhold or delay its approval. Transfers of Interim Supply Allocations shall continue in effect until the earlier of (1) delivery of written notice to the SFPUC by the transfer participants that the transfer has been rescinded or (2) December 31, 2018.

#### **Environmental Enhancement Surcharge**

Beginning with wholesale water rates for fiscal year 2011-12, and continuing for the duration of the Interim Supply Limitation, the Commission will establish the Environmental Enhancement Surcharge concurrently with the budget-coordinated rate process set forth in the Agreement. The monetary amount of the Environmental Enhancement Surcharge per volume of water, such as dollars per acre-foot, will be equivalent for Retail Customer use in excess of 81 MGD and Wholesale Customer use in excess of 184 MGD.

Beginning in fiscal year 2011-12, the Environmental Enhancement Surcharge will be levied only if and when combined Retail Customer and Wholesale Customer purchases exceed the Interim Supply Limitation of 265 MGD and if the fund described below has been established by the San Francisco Board of Supervisors. In that event, the Environmental Enhancement Surcharge will apply to Retail Customers for use in excess of 81 MGD and to individual Wholesale Customers for use in excess of their Interim Supply Allocations established by the Commission.

1. Environmental Enhancement Surcharges related to the Retail Customers' use in excess of their 81 MGD Retail Customer Allocation will be paid by the SFPUC, and no portion of such surcharges may be allocated to Wholesale Customers. The method of recovering the Environmental Enhancement Surcharges imposed upon Retail Customers shall be within the sole discretion of the SFPUC.

2. Environmental Enhancement Surcharges related to the individual Wholesale Customers' use in excess of their respective Interim Supply Allocations will be paid to the SFPUC by individual Wholesale Customers.

Environmental Enhancement Surcharges paid by the SFPUC and by Wholesale Customers will be placed into a restricted reserve fund. The SFPUC will request the San Francisco Board of Supervisors to establish this fund by ordinance and, if adopted, the fund will be subject to the following restrictions:

1. Interest earnings will stay in the reserve fund.

2. The reserve fund shall (a) be subject to automatic appropriation; (b) require unexpended and unencumbered fund balances to be carried forward from year to year; and (c) not be transferred to the San Francisco General Fund.

3. The reserve fund may be used only for specific environmental restoration and enhancement measures for the Sierra and local watersheds, such as those included in the Watershed Environmental Improvement Program.

4. Environmental Enhancement Surcharge proceeds shall be expended in an expeditious manner. Any Environmental Enhancement Surcharge proceeds that remain in the reserve fund as of December 31, 2018 shall be used to complete projects previously approved. Upon completion of the identified projects, the balance of any unexpended sums in the reserve fund shall be distributed to BAWSCA and the SFPUC in proportion to the total amount of surcharges assessed to the Wholesale and Retail Customers, respectively.

Specific uses of Environmental Enhancement Surcharges will be decided by the SFPUC and BAWSCA General Managers following input from environmental stakeholders and other interested members of the public. If parties are unable to agree, then they will jointly select a third person to participate in making the decision.

# San Jose/ Santa Clara Interim Supply Allocation and Process for Reduction/ Termination.

San Francisco will supply a combined annual average of 9 MGD to the cities of San Jose and Santa Clara through 2018. Water supplied by San Francisco may only be used in the existing defined service areas in the northern portions of San Jose and Santa Clara. San Francisco may reduce the quantity of water specified in this section when it establishes the Interim Supply Allocations for Wholesale Customers. The establishment of Interim Supply Allocations for San Jose and Santa Clara shall not be considered a reduction of supply, provided that the Interim Supply Allocations assigned to San Jose and Santa Clara do not effect a reduction greater than the aggregate average reduction in Individual Supply Guarantees for Wholesale Customers that have such guarantees.

## San Francisco Decisions in 2018 Regarding Future Water Supply

By December 31, 2018, San Francisco will have completed any necessary CEQA review that is relevant to making San Jose and Santa Clara permanent customers of the Regional Water System and will decide whether or not to make San Jose and Santa Clara permanent customers of the Regional Water System. San Francisco will make San Jose and Santa Clara permanent customers only if, and to the extent that, San Francisco determines that Regional Water System long term water supplies are available. In the event that San Francisco decides to afford permanent status to San Jose and Santa Clara, the Agreement will be amended.

By December 31, 2018, San Francisco will have completed any necessary CEQA review and will decide how much water if any, in excess of the Supply Assurance it will supply to Wholesale Customers from the Regional Water System to meet their projected future water demands until the year 2030, and whether to offer a corresponding increase in the Supply Assurance as a result of its determination.

## **Retained Discretion of SFPUC and Wholesale Customers**

The Agreement contemplates discretionary actions that the SFPUC and the Wholesale Customers may choose to take in the future that could result in physical changes to the environment ("Discretionary Actions"). The Discretionary Actions include decisions to:

- 1. Develop additional or alternate water resources by the SFPUC or one or more Wholesale Customers;
- 2. Implement the physical facilities comprising the WSIP by December 31, 2015;
- 3. Approve wheeling proposals by Wholesale Customers;

- 4. Approve new wholesale customers and water exchange or cost sharing agreements with other water suppliers;
- 5. Provide additional water to San Jose and/or Santa Clara;
- 6. Offer permanent status to San Jose and/or Santa Clara;
- 7. Reduce or terminate supply to San Jose and/or Santa Clara;
- 8. Provide additional water to Wholesale Customers in excess of the Supply Assurance to meet their projected future water demands; and
- 9. Offer a corresponding volumetric increase in the Supply Assurance.

# Wholesale Revenue Requirement

The Agreement shall be applicable only to the water rates charged by San Francisco to the Wholesale Customers. Nothing contained in the Agreement shall limit, constrain, or in any way affect the rates which San Francisco may charge for water sold to Retail Customers or the methodology by which such rates are determined.

The Agreement sets forth the method by which the Wholesale Customers' collective share of expenses incurred by the SFPUC in delivering water to them will be determined.

The Agreement implements two general principles as follows: (1) the Wholesale Customers should not pay for expenses of SFPUC operations from which they receive no benefit and (2) the Wholesale Customers should pay their share of expenses incurred by the SFPUC in delivering water to them on the basis of Proportional Annual Use unless otherwise explicitly provided in the Agreement.

To implement these general principles, the Wholesale Revenue Requirement will consist of, and be limited to the Wholesale Customers' shares of the following categories of expense:

- 1. Capital cost recovery of Water Enterprise Existing Assets, and Hetch Hetchy Enterprise Existing Assets classified as Water-Only and the Water-Related portion of Joint assets.
- 2. Contribution to the capital cost of Water Enterprise New Regional Assets.
- 3. Water Enterprise operation and maintenance expenses, including power purchased from the Hetch Hetchy Enterprise that is used in the operation of the Water Enterprise.
- 4. Water Enterprise administrative and general expenses.
- 5. Water Enterprise property taxes.
- 6. The Water Enterprise's share of the Hetch Hetchy Enterprise's operation and maintenance, administrative and general, and property tax expenses.
- 7. The Water Enterprise's share of the Hetch Hetchy Enterprise's capital cost of New Assets classified as Water-Only and the Water-Related portion of Joint Assets.

In each of these cost categories, Direct Retail Expenses will be allocated entirely to Retail Customers. Direct Wholesale Expenses will be allocated entirely to the Wholesale Customers. Regional Expenses will be allocated between Retail Customers and Wholesale Customers.

For purposes of establishing the rates to be charged Wholesale Customers, expenses will be based on the budget for, and estimates of water purchases in, the following fiscal year. For purposes of accounting, the Wholesale Revenue Requirement will be determined on the basis of actual expenses incurred and actual water use.

In addition, rates charged to Wholesale Customers may include the Wholesale Customers' contribution to a Wholesale Revenue Coverage Reserve, which is not included in the Wholesale Revenue Requirement itself.

# **Capital Cost Recovery – Existing Regional Assets**

SFPUC has previously advanced funds to acquire or construct Existing Assets used and useful in the delivery of water to both Wholesale Customers and Retail Customers. The Parties estimate that the Wholesale Customers' share of the net book value of these assets, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately \$366,734,424. In addition, SFPUC has also previously advanced funds received from Retail Customer revenues to acquire or construct assets included in Construction-Work-In-Progress (CWIP) as of June 30, 2009. The Parties estimate that the Wholesale Customers' share of the book value of these revenue funded capital expenditures, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately \$15,594,990. The Wholesale Customers shall pay their share of the cost of Existing Assets and revenue-funded CWIP by amortizing such amounts over 25 years at an interest rate of 5.13 percent.

The Wholesale Customers, acting through BAWSCA, may prepay the remaining unpaid Existing Assets principal balance, in whole or in part, at any time without penalty or early payment premium.

# Capital Cost Contribution – New Regional Assets

The Wholesale Customers shall pay the wholesale share of Net Annual Debt Service for new Regional Assets.

- 1. The amount of Net Annual Debt Service for New Regional Assets will be determined for each series of Indebtedness issued. Until the proceeds of a particular series are Substantially Expended, the amount attributable to specific projects will be based on the expected use of proceeds shown in the "Certificate Regarding Use of Proceeds" executed by the SFPUC General Manager on behalf of the Commission in connection with the sale of the Indebtedness.
- 2. After the proceeds of a series are Substantially Expended, the SFPUC General Manager will prepare and execute a certificate showing the actual expenditure of proceeds at an allocation of Net Debt Service to New Regional Assets for a series of bonds will be used in the fiscal year in which the proceeds have been Substantially Expended and thereafter.
- 3. The Wholesale Customers' share of Net Annual Debt Service for the New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the projects in the WSIP are categorized as Direct Wholesale.) The Wholesale Customers' share of Net Annual Debt Service for all other New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use.
- 4. If Indebtedness is issued by the SFPUC to refund the 2006 Revenue Bonds, Series A or to refund any other long-term Indebtedness issued after July 1, 2009, the Net Annual Debt Service attributable to proceeds used for refunding will be allocated on the same basis as the Indebtedness being refunded.
- 5. In addition to Net Debt Service, Wholesale Customers will pay a proportionate share of annual administrative costs associated with Indebtedness, such as bond trustee fees, credit rating agency fees, letter of credit issuer fees, San Francisco Revenue Bond Oversight Committee fees, etc., but only to the extent such fees are neither paid from proceeds of Indebtedness nor included in SFPUC operation and maintenance or administrative and general expenses.

The Wholesale Customers shall pay the wholesale share of the appropriation contained in the SFPUC annual budget for each year to be used to acquire or construct New Regional Assets.

The Wholesale Customers' share of the annual appropriation for revenue-funded New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the Repair and Replacement projects in the SFPUC's most recent capital improvement program updated on February 10, 2009, is categorized as Direct Wholesale.) The Wholesale Customers' share of the annual appropriation for all other revenue-funded New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use in each fiscal year. The amount appropriated in each fiscal year for the wholesale share of New Regional Assets shall be contributed to the Wholesale Capital Fund.

# Hetch Hetchy Enterprise Expenses

There are two steps involved in determining the amount of the Wholesale Customers' share of Hetch Hetchy Enterprise expenses.

1. The first step is to determine the Water Enterprise's share of Hetch Hetchy Enterprise operation expenses, maintenance expenses, administrative and general expenses, and property taxes.

2. The second step is to determine the Wholesale Customers' share of expenses allocable to the Water Enterprise.

The Water Enterprise's share of Hetch Hetchy Enterprise expenses consist of 100 percent of Water-Only expenses and the Water-Related portion (45%) of Joint expenses.

The Wholesale Customers' share of the sum of the Water Enterprise's share of Hetch Hetchy Enterprise expenses shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

Wholesale Customers are also allocated a share of Hetch Hetchy Enterprise capital costs. The components of Hetch Hetchy Enterprise capital costs are as follows:

- 1. The Wholesale Customers' repayment of their share of Hetch Hetchy Existing Assets (Water-Only and the Water-Related portion (45 percent) of joint assets).
- 2. The Water Enterprise will be assigned 100 percent of Net Annual Debt Service attributable to acquisition and construction of New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of Net Annual Debt Service on New Hetch Hetchy Enterprise Joint assets.
- 3. The Water Enterprise will be assigned 100 percent of capital expenditures from revenues for New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of such expenditures for new Hetch Hetchy Enterprise Joint assets.

The Wholesale Customers' share of the Net Annual Debt Service and revenue funded capital expenditures shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

# Additional Agreements Related to Financial Issues

The Wholesale Customers have no entitlement to any of the following sources of revenue to the SFPUC.

- 1. Revenues from leases or sales of SFPUC real property.
- 2. Revenues from other utility services such as the sale of electric power, natural gas and steam.
- 3. Revenues from the sale of water to customers and entities other than the Wholesale Customers.

- 4. Revenues earned from the investment of SFPUC funds other than funds contributed by the Wholesale Customers to the Wholesale Revenue Coverage Reserve or the Wholesale Capital Fund. Wholesale Customers are also entitled to the benefit of earnings on proceeds of Indebtedness (through expenditure on New Regional Assets and /or application to Debt Service) and to interest on the Balancing Account.
- 5. Revenues not related to the sale of water.

The Wholesale Customers will not be charged with any of the following expenses:

- 1. Capital costs for assets constructed or acquired prior to July 1, 1984 other than Existing Asset costs.
- 2. Expenses incurred by the SFPUC for generation and distribution of electric power, including Hetch Hetchy Enterprise Power-Only expenses and the Power-Related share of Hetch Hetchy Enterprise Joint expenses. An exception to this is Regional energy costs incurred by the Water Enterprise, for which Wholesale Customers are charged on the basis of Proportional Annual Use.
- 3. Expenses incurred by SFPUC in providing water to Retail Customers.
- 4. Expenses associated with the SFPUC's accruals or allocations for uncollectible Retail Water accounts.
- 5. Attorneys' fees and costs incurred by the Wholesale Customers that a court of competent jurisdiction orders San Francisco to pay as part of a final, binding judgment against San Francisco.
- 6. Any expenses associated with funding any reserves (other than the required Wholesale Revenue Coverage Reserve) accrued and not anticipated to be paid within one year unless such reserve is established by mutual agreement of the SFPUC and BAWSCA.
- 7. Any expenses accrued in respect to pending or threatened litigation, damage or personal injury claims or other loss contingencies unless projected to be paid within one year. Otherwise, such expenses will be charged to the Wholesale Customers when actually paid.
- 8. Any expenses associated with installing, relocating, enlarging, removing or modifying meters and service connections at the request of an individual Wholesale Customer.
- 9. The Retail Customers' portion of any Environmental Enhancement Surcharges imposed to enforce the Interim Supply Limitation.

The following payments by Wholesale Customers, individually or collectively, are not credited as Wholesale revenues.

- 1. Payments by individual Wholesale Customers of the Environmental Enhancement Surcharge imposed to enforce the Interim Supply Limitation.
- 2. Payments of attorneys' fees and costs incurred by San Francisco that a court of competent jurisdiction orders the Wholesale Customers to pay as part of a final, binding judgment against the Wholesale Customers.
- 3. Payments by individual Wholesale Customers for installation, relocation, enlargement, removal or modification of meters and service connections requested by, and charged to, a Wholesale Customer.

- 4. Payments applied to the amortization of the ending balance in the balancing account under the 1984 Agreement.
- 5. Payments of the Water Management Charge which are delivered to BAWSCA.
- 6. Payments directed to the Wholesale Revenue Coverage Reserve.
- 7. Prepayments of certain capital and revenues payment.

The Wholesale Customers will receive a proportional benefit from funds received by the SFPUC from (a) governmental grants, rebates, reimbursements or other subventions, (b) private-sector grants for Regional capital or operating purposes of the Water Enterprise and the Water-Only and Water-related portion of Joint Hetch Hetchy Water Enterprise expenses, or (c) a SFPUC use of taxable bonds.

The Wholesale Customers will receive a proportionate benefit from recovery of damages, including liquidated damages, by SFPUC from judgments against or settlements with contractors, suppliers, sureties, etc., related to Regional Water System projects and the Water-Only and Water-Related portion of Joint Hetch Hetchy Enterprise projects.

The SFPUC will continue to charge Wholesale Customers for assets acquired or constructed with proceeds of Indebtedness on which Wholesale Customers paid Debt Service during the Term of the Agreement on the "cash" basis (as opposed to the "utility" basis) after the expiration or earlier termination of the Agreement.

#### **Rate Adjustments**

Adjustments to the rates applicable to the Wholesale Customers, other than emergency rate increases and drought rate increases, shall be coordinated with the budget development process described in the Agreement.

The Commission may adjust the Wholesale Customers' rates in response to an Emergency that damages the Regional Water System and disrupts San Francisco's ability to maintain normal deliveries of water to Retail and Wholesale Customers. In such an Emergency, the Commission may adopt an emergency rate surcharge applicable to Wholesale Customers without following the budgeting procedures set forth in the Agreement, provided that any such rates surcharge imposed by the Commission shall be applicable to both Retail and Wholesale Customers and incorporate the same percentage increase for all customers. Any emergency rate surcharge adopted by the Commission shall remain in effect only until the next-budget coordinated rate-setting cycle.

If the Commission declares a water shortage emergency under Water Code Section 350, implements the Tier 1 Shortage Plan and imposes drought rates on Retail Customers, it may concurrently adjust wholesale rates independently of coordination with the annual budget process. Those adjustments may be designed to encourage water conservation and may constitute changes to the structure of the rates. Drought Rate payments and payments of excess use charges levied in accordance with the Tier 1 Shortage Plan constitute Wholesale Customer Revenue and count towards the Wholesale Revenue Requirement. The SFPUC may use these revenues to purchase additional water for the Wholesale Customers from the State Drought Water Bank or other willing seller.

### **Rate Structure**

The Agreement is not intended and shall not be construed to limit the Commission's right (a) to adjust the structure of the rate schedule applicable to the Wholesale Customers (i.e., the relationship among the several charges set out therein) or (b) to add, delete, or change the various charges which make up the rate schedule, provided that neither such charges nor the structure of the rate schedule(s) applicable to the Wholesale Customers shall be arbitrary, unreasonable, or unjustly discriminatory as among said customers. The SFPUC will give careful consideration to proposals for changes in the rate schedule made jointly by the Wholesale Customers but, subject to the limitations set out above, shall retain the sole and exclusive right to determine the structure of the rate schedule.

The SFPUC may recommend, and the Commission may adopt, changes in the structure of wholesale rates at any time. However, the new rate schedule implementing these changes will become effective at the beginning of the following fiscal year.

# **Balancing Account**

After the close of each fiscal year, the SFPUC will compute the costs allocable to the Wholesale Customers for that fiscal year based on actual costs incurred by the SFPUC and actual amounts of water used by the Wholesale Customers and the Retail Customers. That amount will be compared to the amounts billed to the Wholesale Customers for that fiscal year (including any Excess Use Charges, but excluding revenues not credited to the Wholesale Revenue Requirement). The difference will be posted to a "balancing account" as a credit to, or charge against, the Wholesale Customers. Interest shall also be posted to the balancing account calculated by multiplying the amount of the opening balance by the average net interest rate, certified by the Controller as earned in the San Francisco Treasury for the previous fiscal year on the San Francisco County Pooled Investment Account. Interest, when posted, will carry the same mathematical sign (whether positive or negative) as carried by the opening balance. The amount posted to the balancing account in each year shall be added to, or subtracted from, the balance in the account from previous years.

If the amount in the balancing account is owed to the Wholesale Customers (a positive balance), the SFPUC shall take it into consideration in establishing Wholesale rates. However, the SFPUC need not apply the entire amount to reduce Wholesale rates for the immediately ensuing year. Instead, the SFPUC may prorate a positive ending balance over a period of up to three successive years in order to avoid fluctuating decreases and increases in Wholesale rates.

If the amount in the balancing account is owed to the SFPUC (a negative balance), the SFPUC shall not be obligated to apply all or any part of the negative balance in establishing Wholesale rates for the immediately ensuring year. Instead, the SFPUC may prorate the negative balance in whole or in part over multiple years in order to avoid fluctuating increases and decreases in Wholesale rates. As of June 30, 2011, the amount of the credit due to the SFPUC for the balancing account was \$40,253,661.

# Wholesale Revenue Coverage Reserve

The SFPUC may include in wholesale rates for any fiscal year an additional dollar amount ("Wholesale Revenue Coverage"), which for any fiscal year shall equal the following:

- 1. The lesser of (i) 25% of the Wholesale Customers' share of Net Annual Debt Service for that fiscal year, or (ii) the amount necessary to meet the Wholesale Customers' proportionate share of Debt Service coverage required by then-current Indebtedness for that fiscal year, minus
- 2. A credit for (i) the actual amount previously deposited in the "Wholesale Revenue Coverage Reserve," (ii) accrued interest on the amounts on deposit in the Wholesale Revenue Coverage Reserve, and (iii) an amount equal to any additional interest that would have accrued on the actual amounts previously deposited in the Wholesale Revenue Coverage Reserve assuming no withdrawals had been made therefrom.

During each fiscal year, the SFPUC will set aside and deposit that portion of revenue equal to Wholesale Revenue Coverage into a separate account that the SFPUC will establish and maintain, to be known as the "Wholesale Revenue Coverage Reserve." Deposits into the Wholesale Revenue Coverage Reserve shall be made no less frequently than monthly. The Wholesale Revenue Coverage Reserve shall be credited with interest. The SFPUC may use amounts in the Wholesale Revenue Coverage Reserve for any lawful purpose. Any balance in the Wholesale Revenue Coverage Reserve in excess of the Wholesale Revenue Coverage amount as of the end of any fiscal year shall be applied as a credit against wholesale rates in the immediately following fiscal year unless otherwise directed by BAWSCA.

Conditions in the municipal bond market may change from those prevailing in 2009. If, prior to expiration of the Term, the SFPUC determines that it would be in the best financial interest of both Retail Customers and Wholesale Customers of the Regional Water System for the Debt Service coverage requirement to be increased in one or more series of proposed new Indebtedness above 1.25%, or for the coverage covenant to be strengthened in other ways, it will provide a written report to BAWSCA. The report will contain (1) a description of proposed covenant(s) in the bond indenture; (2) an explanation of how savings are expected to be achieved (e.g., increase in the SFPUC's credit rating over the then-current level; ability to obtain credit enhancement, etc.); (3) the estimated all-in true interest cost savings; (4) a comparison of the Wholesale Revenue Requirements using the Debt Service coverage limitation and under the proposed methodology; and (5) a comparison of the respective monetary benefits expected to be received by both Retail and Wholesale Customers. The SFPUC and BAWSCA agree to meet and confer in good faith about the proposed changes.

Any increase in Debt Service coverage proposed by the SFPUC shall be commensurate with Proportional Water Use by Retail and Wholesale Customers. If the SFPUC demonstrates that an increase in Debt Service coverage will result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, BAWSCA may agree to a modification of the Wholesale Revenue Coverage requirement. If BAWSCA does not agree to a proposed modification in coverage requirements in the covenants for new Indebtedness, SFPUC may nevertheless proceed with the modification and the issuance of new Indebtedness. Any Wholesale Customer, or BAWSCA, may challenge an increase in the Wholesale Revenue Requirement resulting from the modification in Debt Service coverage through arbitration. If the arbitrator finds that the increase in Debt Service coverage (1) did not and will not result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, or (2) was not commensurate with Proportional Water Use, the arbitrator may order the Wholesale Revenue Requirement to be recalculated both retrospectively and prospectively to eliminate the differential impact to Wholesale or Retail Customers.

# **Working Capital Requirement**

The SFPUC maintains working capital in the form of unappropriated reserves for the purpose of bridging the gap between when the SFPUC incurs operating expenses required to provide service and when it receives revenues from its Retail and Wholesale Customers. The Wholesale Customers shall fund their share of working capital as part of the annual Wholesale Revenue Requirement calculation. The amount of wholesale working capital for which the Wholesale Customers will be responsible will be determined using the 60-day standard formula approach.

Applying this approach, annual wholesale working capital equals one-sixth of the wholesale allocation of operation and maintenance, administrative and general, and property tax expenses for the Water and Hetch Hetchy Enterprises. Wholesale working capital shall be calculated separately for the Water and Hetch Hetchy Enterprises.

# Wholesale Capital Fund

The SFPUC shall establish a comparable Wholesale Revenue-Funded Capital Fund (Wholesale Capital Fund) to enable the Wholesale Customers to fund the wholesale share of revenue-funded New Regional Assets. The SFPUC may include in wholesale rates for any fiscal year an amount equal to the wholesale share of the SFPUC's appropriation for revenue funded New Regional Assets for that year, which sum will be credited to the Wholesale Capital Fund. The wholesale share of other sources of funding, where legally permitted and appropriately accounted for under GAAP, will also be credited to the Wholesale Capital Fund, together with interest earnings on the Wholesale Capital Fund balance.

The SFPUC will expend revenues appropriated and transferred to the Wholesale Capital Fund only on New Regional Assets.

In order to prevent the accumulation of an excessive unexpended and unencumbered surplus in the Wholesale Capital Fund, any excess fund balance (i.e., an accumulated unexpended, unencumbered amount in excess of 10% of the wholesale share of total capital appropriations for New Regional Assets during the five preceding years) will be transferred for the credit of the Wholesale Customers to the Balancing Account.

# Arbitration and Judicial Review

All questions or disputes arising under the following subject areas shall be subject to mandatory, binding arbitration and shall not be subject to judicial determination:

- 1. the determination of the Wholesale Revenue Requirement, which shall include both the calculations used in the determination and the variables used in those calculations;
- 2. the SFPUC's adherence to accounting practices and conduct of the compliance audit; and
- 3. the SFPUC's classification of new assets for purposes of determining the Wholesale Revenue Requirement.

All other questions or disputes arising under this Agreement shall be subject to judicial determination. Disputes about the scope of arbitrability shall be resolved by the courts.

# Preservation of Water Rights; Notice of Water Rights Proceedings

It is the intention of San Francisco to preserve all of its water rights, irrespective of whether the water held under such water rights is allocated under the Agreement. Nothing in the Agreement shall be construed as an abandonment, or evidence of an intent to abandon, any of the water rights that San Francisco presently possesses.

#### **Reservations of, and Limitations on, Claims**

The 1984 Agreement resolved a civil action brought against San Francisco by certain of the Wholesale Customers. Plaintiffs in that action contended that they, and other Wholesale Customers that are municipalities or special districts, were "co-grantees" within the meaning of Section 8 of the Act and were entitled to certain rights, benefits and privileges by virtue of that status. San Francisco disputed those claims.

Nothing in the Agreement, or in the Individual Water Sales Contracts, shall be construed or interpreted in any way to affect the ultimate resolution of the controversy between the Parties concerning whether any of the Wholesale Customers are "co-grantees" under the Act and, if so, what rights, benefits and privileges accrue to them by reason of that claimed status.

The following claims, which San Francisco disputes, are reserved but may not be asserted during the Term (or portions thereof, as indicated):

- 1. The Wholesale Customers' claim that the Act entitles them to water at cost.
- 2. The Wholesale Customers' claim that San Francisco is obligated under the Act or state law to supply them with additional water in excess of the Supply Assurance. This claim may not be asserted unless and until San Francisco decides not to meet projected water demands of Wholesale Customers in excess of the Supply Assurance.
- 3. The claim by San Jose and Santa Clara that they are entitled under the Act, or any other federal or state law, to permanent, non-interruptible status and to be charged rates identical to those charged other Wholesale Customers. This claim may not be asserted unless and until San Francisco notifies San Jose or Santa Clara that it intends to interrupt or terminate water deliveries.
- 4. The Wholesale Customers' claim that the SFPUC is not entitled to impose a surcharge for lost power generation revenues attributable to furnishing water in excess of the Supply Assurance. This claim may not be asserted unless and until SFPUC furnishes water in excess of the Supply Assurance during the Term and also includes such a surcharge in the price of such water.

5. Claims by Wholesale Customers (other than San Jose and Santa Clara, whose service areas are fixed) that SFPUC is obligated under the Act or state law to furnish water, within their Individual Supply Guarantee, for delivery to customers outside their existing service area and that Wholesale Customers are entitled to enlarge their service areas to supply those customers. Such claims may be asserted only after SFPUC's denial of, or failure for six months to act on, a written request by a Wholesale Customer to expand its service area.

The Wholesale Customers (and the SFPUC, where specified) will refrain from the following activities during the Term (or portions thereof, as specified):

- 1. The Wholesale Customers and the SFPUC will not contend before any court, administrative agency or legislative body or committee that the methodology for determining the Wholesale Revenue Requirement (or the requirements for (a) amortization of the ending balance under the 1984 Agreement, or (b) contribution to the Wholesale Revenue Coverage) determined in accordance with the Agreement violates the Act or any other provision of federal law, state law, or San Francisco's City Charter, or is unfair, unreasonable or unlawful.
- 2. The Wholesale Customers will not challenge the transfer of funds by the SFPUC to any other San Francisco City department or fund, provided such transfer complies with the San Francisco City Charter. The transfer of its funds, whether or not permitted by the City Charter, will not excuse the SFPUC from its failure to perform any obligation imposed by the Agreement.
- 3. The Wholesale Customers and the SFPUC will not assert monetary claims against one another based on the 1984 Agreement other than otherwise arbitral claims arising from the three fiscal years immediately preceding the start of the Term (i.e., Fiscal Years 2006-07, 2007-08 and 2008-09).

The Wholesale Customers do not, by executing the Agreement, concede the legality of the SFPUC's establishing Interim Supply Allocations or imposing Environmental Enhancement Surcharges on water use in excess of such allocations. Any Wholesale Customer may challenge such allocation when imposed and/or such surcharges if and when levied, in any court of competent jurisdiction.

The furnishing of water in excess of the Supply Assurance by San Francisco to the Wholesale Customers shall not be deemed or construed to be a waiver by San Francisco of its claim that it has no obligation under any provision of law to supply such water to the Wholesale Customers, nor shall it constitute a dedication by San Francisco to the Wholesale Customers of such water.

# **Prohibition of Assignment**

The Agreement shall be binding on, and shall inure to the benefit of, the Wholesale Customers and San Francisco, and their respective successors and permitted assigns. Each Wholesale Customer agrees that it will not transfer or assign any rights or privileges under the Agreement, either in whole or in part, or make any transfer of all or any part of its water system or allow the use thereof in any manner whereby any provision of the Agreement will not continue to be binding on it, its assignee or transferee, or such use of the system. Any assignment or transfer in violation of this covenant, and any assignment or transfer that would result in the supply of water in violation of the Act, shall be void.

Nothing shall prevent any Wholesale Customer (except the California Water Service Company and Stanford) from entering into a joint powers agreement or a municipal or multi-party water district with any other Wholesale Customer (except the two listed above) to exercise the rights and obligations granted to and imposed upon the Wholesale Customers hereunder, nor shall this section prevent any Wholesale Customer (except the two listed above) from succeeding to the rights and obligations of another Wholesale Customer hereunder as long as the Wholesale Service Area served by the Wholesale Customers involved in the succession is not thereby enlarged.

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# **APPENDIX D**

#### WATER SYSTEM IMPROVEMENT PROGRAM

#### **Program Development and Chronology**

The SFPUC began development of the Capital Improvement Program ("CIP") in the late 1990s through a series of studies, reports, and authorizations. The SFPUC initiated a water supply planning effort that culminated in the Water Supply Master Plan, issued in April 2000. Concurrent with the Water Supply Master Plan efforts, reliability studies of the water system facilities were conducted to assess their vulnerability to earthquakes, landslides, fire, flood, and power outages.

On May 28, 2002, the Commission approved the <u>Long-Term Strategic Plan for Capital Improvements</u>, the <u>Long-Range Financial Plan</u> and the <u>Capital Improvement Program and Appendices</u> (Resolution No. 02-0101). These reports establish the original framework of the SFPUC CIP.

On November 5, 2002, San Francisco residents voted to approve Proposition A, a \$1.628 billion revenue bond measure to fund the CIP and undertake the most extensive upgrade of the local and regional water delivery systems in the City's history. The original program contained a total of seventy-seven water infrastructure projects designed to replace or repair key facilities, improve the system's seismic robustness, enhance water quality, and improve water supply reliability.

On November 5, 2002 the voters also approved Proposition E, which authorizes the SFPUC, subject to the referendum process, to issue revenue bonds, notes and other forms of indebtedness when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, preparing or improving water facilities or wastewater facilities or combinations of water and wastewater facilities under the jurisdiction of the SFPUC. Board action to authorize or issue bonds under this provision is subject to certain additional conditions, requiring certification by an independent engineer and certification by the San Francisco Planning Department. Proposition E also established the Public Utilities Rate Fairness Board.

In August 2003, the SFPUC submitted its first annual status report and update to the State on the implementation of the CIP as required by State Assembly Bill 1823, Wholesale Regional Water System Security and Reliability Act ("AB 1823"). The status report documented the changes made to the May 2002 version of the CIP. Pursuant to the reporting requirements of AB 1823, annual reports describing the progress made on the implementation of the program have been submitted to the State on or before September 1 of each year.

In October 2004, the SFPUC General Manager ordered a thorough review of the CIP with a focus on ensuring system-wide integration of the projects within the program. This undertaking resulted in the development of program-specific goals and objectives, the refinement of project scopes and renaming of the CIP to the WSIP. The scope, schedule, and budget of the program were refined based on the newly adopted goals and objectives.

In February 2005, the SFPUC published its refined program, entitled <u>Water System Improvement Program</u> <u>Prepared for the Programmatic Environmental Impact Report</u>, which documented the Levels of Services ("LOS") goals used to define the WSIP for the Program Environmental Impact Report (the "PEIR"). The February 2005 program description presented water system improvements recommended to meet LOS goals for water quality, seismic and delivery reliability, and water supply.

In August 2005, the SFPUC retained the services of Parsons Water & Infrastructure ("Parsons") with CH2M Hill as a major sub-consultant to provide program, project, and preconstruction management services on the WSIP. The consultant team's first assignment was to review the program for adequacy in meeting LOS goals; determine whether any additional projects were needed to fulfill the goals; and review individual project scopes, budgets, and schedule requirements. Parsons and CH2M Hill provided the results of their assessment and their recommendations in the *Water System Improvement Program Assessment Report* ("Assessment"), published on October 21, 2005. The Assessment supported and confirmed that the overall program met the established LOS goals, and the necessity and scope of individual projects in the WSIP. The Assessment also identified some specific recommendations for changes in the overall program and individual projects.

In addition to this independent review, a Seismic Safety Task Force was convened to provide guidance on the seismic design requirements of the program. This group, comprised of five experts in the fields of structural and seismic engineering, was tasked to assess potential system vulnerabilities and propose seismic design criteria for WSIP projects.

The revised program and the recommendations, upon which SFPUC management, staff, the Assessment Team, Bay Area Water Stewards and BAWSCA agreed, were adopted by the Commission on November 29, 2005. The revised program is described in the <u>Water System Improvement Program</u> (SFPUC, January 2006). The refined scopes, schedules, and budgets documented in that report are considered the "Original or Baseline Scopes, Schedules and Budget" for the WSIP, and are referred to as the "December 2005 Approved Scopes, Schedules and Budget."

On January 19, 2006, pursuant to the reporting requirements of AB 1823, the SFPUC submitted a change notice report, <u>AB1823: Notice of Changes to Water System Improvement Program ("Change Notice") (SFPUC,</u> <u>January 2006)</u>, to the State, along with the January 2006 program description document. This Change Notice described in detail changes between the program adopted in November 2005 and the previously adopted program in May 2002, including development of the LOS goals and subsequent project descriptions. The report was amended to respond to questions from the California Seismic Safety Commission and resubmitted to the State on March 8, 2006.

As projects developed during 2006 and 2007, more information became available about project design details, environmental compliance and permitting needs, right-of-way challenges, and facility shutdown and construction sequencing requirements. In 2007, the WSIP Management Team (the "WSIP Team") initiated a number of initiatives to assess various conditions and aspects of the WSIP that may impact the SFPUC's ability to deliver the program as planned. These comprehensive programmatic efforts, which included a WSIP Risk Assessment and a WSIP Re-alignment Initiative, resulted in the formulation of a comprehensive risk management strategy and the identification of project scope, schedule and budget adjustments necessary to best deliver the program while continuing to meet all underlying WSIP LOS goals.

On July 28, 2009, in compliance with AB 1823 and AB 2437, the Commission adopted the June 2009 Revised WSIP, which established new approved scopes, schedules and budgets for the program. This is referred to herein as the "June 2009 Approved Scopes, Schedules and Budget." The variance between these two budgets is summarized in the "*Program Budget*" section of this document. This report described in detail the schedule and major scope changes made to the previously adopted program (i.e., program approved by the Commission on February 20, 2008 and described in the AB 1823 Change Notice report dated March 31, 2008). The September 1, 2009 Change Notice Report included the latest regional project schedules (June 2009 Approved Schedules) and regional project descriptions (June 2009 Approved Scopes) approved for the WSIP.

On July 12, 2011, in compliance with AB 1823, the Commission adopted revisions to the WSIP project scopes, schedules and budgets which were last approved in 2009.

On September 1, 2011, the SFPUC submitted its latest <u>AB 1823: Notice of Changes to Water System</u> <u>Improvement Program Report</u> to the State. This report describes in detail the schedule and major scope changes made to the previously adopted program (i.e., program approved by the Commission on July 28, 2009). The September 1, 2011 Change Notice Report includes the latest regional project schedules (June 2011 Approved Schedules) and regional project descriptions (June 2011 Approved Scopes) approved for the WSIP. Since AB 1823 does not require the reporting of budget changes, updated budget figures were not included in any of the Notice of Changes reports submitted to the State.

The June 2011 Revised WSIP enacted a limited number of changes from the June 2009 WSIP, which include modification of the scope of four projects (Seismic Upgrade of BDPL Nos. 3 & 4; Peninsula Pipelines Seismic Upgrade Project; Bioregional Habitat Restoration Project; and Watershed & Environmental Improvement program), and the extension of the overall program completion date from December 2015 to July 2016.

# **Program Objectives**

The WSIP is based on two fundamental principles - a clean, unfiltered water source and a gravity-driven system. Projects within the WSIP are developed based on these principles as well as key policies of the SFPUC, including sustainability and environmental stewardship.

The following program objectives were defined for the program:

- Furnish system improvements to provide high quality water that reliably meets current and foreseeable local, State, and federal requirements.
- Reduce vulnerability of the water system to damage from earthquakes.
- Increase reliability of the system to deliver water by improving redundancy needed to accommodate planned outages for maintenance and unplanned outages resulting from facility failure.
- Provide near-term improvement of water supply/drought protection.
- Set forth long-term water supply/drought management options for technical evaluation, cost analysis, and environmental review.
- Enhance sustainability through improvements that optimize protection of the natural and human environment.
- Provide improvements resulting in a cost-effective fully operational water system.

# Levels of Service Goals

In order to address the program objectives and consequently derive design criteria and develop project-specific scopes for the program, the SFPUC provided direction on Levels of Service ("LOS") goals for water quality, seismic reliability, delivery reliability, and water supply, listed in order of priority. These LOS goals were developed to provide a quantifiable means of setting project-specific design criteria and project scopes for addressing the program objectives. The LOS goals for the program are summarized below:

# I. Water Quality (maintain high water quality)

- Design improvements to meet current and foreseeable future federal and State water quality requirements.
- Provide clean, unfiltered water originating from Hetch Hetchy Reservoir and filtered water from local watersheds.
- Continue to implement watershed protection measures.

# *II.* Seismic Reliability (reduce vulnerability to earthquakes)

- Design improvements to meet current seismic standards.
- Deliver basic service to the three regions in the service area (East/South Bay, Peninsula, and San Francisco) within 24 hours after a major earthquake. Basic service is defined as average winter-month usage, and the performance objective for design of the Regional Water System is 229 mgd. The performance objective is to provide delivery to at least 70 percent of the turnouts in each region, with 104, 44, and 81 mgd delivered to the East/South Bay, Peninsula, and San Francisco, respectively.
- Restore facilities to meet average-day demand of up to 300 mgd within thirty (30) days after a major earthquake.

# *III.* Delivery Reliability (increase delivery reliability and improve ability to maintain the system)

- Provide operational flexibility to allow planned maintenance shutdown of individual facilities without interrupting customer service.
- Provide operational flexibility to minimize the risk of service interruption due to unplanned facility upsets or outages.
- Provide operational flexibility and system capacity to replenish local reservoirs as needed.
- Meet the estimated average annual demand of up to 300 mgd under the conditions of one planned shutdown of a major facility for maintenance concurrent with one unplanned facility outage due to a natural disaster, emergency or facility failure/upset.

# *IV.* Water Supply (meet customer water needs in non-drought and drought periods)

- Meet average annual water demand of 265 mgd from the SFPUC watersheds for retail and wholesale customers during non-drought years for system demands through 2018.
- Meet dry-year delivery needs through 2018 while limiting rationing to a maximum 20 percent systemwide reduction in water service during extended droughts.
- Diversify water supply options during non-drought and drought periods.
- Improve use of new water sources and drought management, including groundwater, recycled water, conservation and transfers.

# V. Sustainability (enhance sustainability in all system activities)

- Manage natural resources and physical systems to protect watershed ecosystems.
- Meet, at a minimum, all current and anticipated legal requirements for protection of fish and wildlife habitat.
- Manage natural resources and physical systems to protect public health and safety.

# VI. Cost-effectiveness (achieve a cost-effective, fully operational system)

- Ensure cost-effective use of funds.
- Maintain gravity-driven system.
- Implement regular inspection and maintenance program for all facilities.

The first four goals, Water Quality, Seismic Reliability, Delivery Reliability, and Water Supply are used to determine project design criteria. The last two goals, Sustainability and Cost-Effectiveness, are overarching program goals that are not applied to specific criteria at the project level and thus are only infrequently described in project and program documents.

#### **Management Approach**

The implementation of the WSIP is led by SFPUC staff in the Infrastructure Division of the SFPUC. The delivery of the program is ultimately the responsibility of the SFPUC General Manager and the SFPUC Assistant General Manager – Infrastructure.

Consultants, however, play a key role in the implementation of the program. Consultants support the WSIP Team on a number of programmatic functions such as strategic program development, risk assessment and mitigation, program controls, various independent technical reviews, construction planning and management, supplier quality surveillance and labor and community relations. The services of consultants are also used on an asneeded or project-specific basis to assist SFPUC staff with functions such as engineering design, environmental review, right-of-way engineering and surveying, and construction management.

The WSIP is divided into two major phases – pre-construction and construction. The Pre-Construction Deputy Director is responsible for overseeing the program through the bid and award phase, which includes all planning, design, environmental review, right-of-way and bidding activities. The Construction Deputy Director is responsible for the program during the construction phase, project close-out phase and for some activities during the design and bid and award phases (e.g., constructability reviews and preparation of contract specifications).

The implementation of the program is managed at three different levels – program, regional and project levels. Specific decision-making authorities are designated for each level. At the program level, the Program Director manages and directs all aspects of the implementation and delivery of the WSIP, including strategic direction of the program, policy, systems and procedures to support execution. At the regional level, Regional Project Managers manage the delivery of all projects assigned to a region during all project phases. At the project level, the Project Manager oversees the delivery of a project through all phases up to the bid and award phase and the Project Construction Manager oversees delivery during the construction and close-out phases.

The management approach during construction is thoroughly documented in the WSIP Construction Management Plan. The latest version of the Construction Management Plan and the Safety Approach associated with the plan, as well as other important information on the WSIP Construction Management ("CM") Program is available on the SFPUC Website at <a href="http://sfwater.org/msc">http://sfwater.org/msc</a> main.cfm/MC ID/15/MSC ID/374.

#### **Program Scope**

The WSIP presently includes a total of 86 projects, which vary in size from a few million dollars to over \$400 million. The projects are divided into two sub-programs – Local and Regional.

The Local Program includes the remaining 40 projects (including 5 Water Supply Projects) that are located within the city limits of San Francisco and only benefit city residents. (As of July 1, 2011, management and implementation of the Water Supply Projects were transferred from the WSIP Local Program to the Water Enterprise Capital Improvement Program.) These projects, which are typically smaller in size, include improvements to existing in-City distribution pipelines, storage reservoirs/tanks, pump stations, and miscellaneous facilities. They are referred to as "Local Projects" and they are reported in Table D-1 below as part of the project category titled "San Francisco Local Projects." The cost of the Local Projects is absorbed in the retail rates of San Francisco customers. Under the WSIP, recycled water projects and some groundwater projects will be classified as Local Projects for rate setting purposes. See "FUTURE WATER DEMAND AND SUPPLY—Water Supply Initiatives."

The Regional Program includes the remaining 46 projects that benefit both San Francisco residents and the 27 Wholesale Customers. These projects, which are typically much larger and located mostly outside San Francisco limits, are referred to as "Regional Projects." They include a wide variety of improvements such as upgrades to and the addition of new treatment, transmission (pipelines, tunnels, pump stations), and storage (dams and reservoirs) facilities spread over seven different counties (Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo, and San Francisco). The cost of the Regional Projects is incorporated in the rates paid by both Retail Customers and Wholesale Customers.

The WSIP is further divided into the following categories of projects:

*San Francisco Local Projects.* The WSIP includes 40 local projects that will enhance the reliability of the In-City Distribution System by replacing aging and seismically vulnerable infrastructures, and will diversify the SFPUC's water supply portfolio. Local projects include improvements to existing and construction of new reservoirs, tanks, pump stations, pipelines and water supply infrastructure.

San Joaquin Regional Projects. These projects are designed to improve water delivery reliability by augmenting three existing transmission pipelines that transmit the Hetch Hetchy water supply across the San Joaquin Valley, and enhance water quality by building the Tesla Disinfection Facility, a new advanced disinfection/treatment facility for the SFPUC's largest source of supply.

Sunol Valley Regional Projects. The projects within this region are designed to address delivery and seismic vulnerabilities associated with the delivery of Hetch Hetchy water through the Sunol Valley and water originating from the Alameda Watershed. Projects include the construction of a new Calaveras Dam, a fourth Alameda Siphon, a new Irvington Tunnel and other connecting large-diameter pipelines, as well as upgrades to the existing Sunol Valley Water Treatment Plant and San Antonio Pump Station. All of these facilities are within or in close proximity to the Calaveras Fault influence zone.

*Bay Division Regional Projects*. The projects within this region address the seismic vulnerability of the four Bay Division Pipelines, which transmit the blend of Hetch Hetchy and Sunol Valley water across the San Francisco Bay to the Peninsula and serve a large number of Wholesale Customers. The projects in this region address the crossing of the Hayward Fault and system vulnerability associated with the close proximity of the San Andreas Fault; and add system redundancy and operational flexibility.

*Peninsula Regional Projects*. The projects within this region are generally designed to address facility seismic vulnerabilities, and meet water quality and delivery goals for the Crystal Springs, San Andreas and Pilarcitos Reservoirs. Projects include the construction of a new Crystal Springs Bypass Tunnel and large-diameter pipelines, as well as upgrades to the existing Harry Tracy Water Treatment Plant, the Pulgas Balancing Reservoir, and the Lower Crystal Springs Dam. All these facilities are located within the San Andreas Fault influence zone.

San Francisco Regional Projects. The projects within this region include the seismic retrofit of the Sunset and University Mound Terminal Reservoirs, and a groundwater storage and recovery project. The two reservoir projects are located within the City but can be used to supply water back to the Northern Peninsula, which can benefit the Wholesale Customers. The groundwater project includes improvements in both San Mateo and San Francisco counties.

Support Projects (formally System Wide Region). In July 2011, the System Wide Region was re-named as Support Projects. These projects include (1) system security upgrades, which involves the development and integration of security components at critical water system facilities, (2) the PEIR, which was prepared in compliance with CEQA to identify and analyze potential programmatic environmental impacts of the proposed system improvements, (3) the Watershed Environmental Improvement Program, which consists of conservation easements and/or fee title purchase of property from willing landowners to permanently protect Alameda Creek Watershed lands, (4) the Bioregional Habitat Restoration project (formerly Habitat Reserve Program), which is intended to provide a coordinated and consolidated approach to compensate for habitat impacts that would result from the implementation of the WSIP projects in the San Joaquin, Sunol Valley, Bay Division and Peninsula Regions of the Regional Water System, and (5) Regional Program management.

The latest program scope, the July 2011 scope, was approved by the Commission on July 12, 2011, and is documented in the <u>AB 1823: Notice of Changes to Water System Improvement Program Report</u> submitted to the State on September 1, 2011.

# 2005 WSIP, 2007 WSIP, 2009 WSIP, and 2011 WSIP Program Schedule and Budgets

The project schedules and budgets first developed when an infrastructure program is created are based on the limited information available at the time. Costs and schedule contingencies are typically added to account for the various levels of certainty and unforeseen circumstances. As projects become better defined through the planning, environmental and design phases, new information becomes available that allows for refinement of project schedules and budgets. It is therefore typical for large infrastructure programs like the WSIP to adopt revised schedules and budgets as part of program implementation.

In the case of the WSIP, major schedule and cost revisions were approved by the Commission in the December 2005 Approved Scopes, Schedules and Budget; the December 2007 Approved Scopes, Schedules and Budget; the June 2009 Approved Scopes, Schedules and Budget and the July 2011 Approved Scopes, Schedules, and Budget. The SFPUC also updates projections of each WSIP's project's completion date and cost at completion on a monthly basis. These projections are published every three months in the WSIP Quarterly Reports, available on the SFPUC Website at: http://sfwater.org/mto\_main.cfm/MC\_ID/35/MSC\_ID/395/MTO\_ID/651.

**Program Schedule**. The overall program completion date adopted as part of the Approved December 2005 Schedule was June 2014. That schedule was based on the extent of project and program definition available at the time. The last project to be completed under that Original Schedule was the San Joaquin Pipeline ("SJPL") System Project. That WSIP completion date was pushed back six months to December 2014 when the December 2007 Approved Scopes, Schedules, and Budget was adopted by the Commission. In this case, the program's completion date was affected by the Seismic Improvements of Bay Division Pipelines Nos. 3 & 4 Project. The WSIP completion date was adopted by the Coember 2015 when the June 2009 Approved Scopes, Schedules, and Budget was adopted by the Commission on July 28, 2009. In this case, the program's completion date was affected by the Calaveras Dam Replacement Project. In July 2011, the Commission approved to extend WSIP's completion date to July 2016.

The additional eight months forecasted in the program's overall completion date is due to the Calaveras Dam Replacement Project, which is forecasted to be the last project to be completed. The WSIP Management team added a schedule contingency to address the risks associated with handling in-situ material containing naturally occurring asbestos during construction. The additional time allowance in the construction schedule accounts for the possibility of work shutdowns or reduced productivity to control airborne contaminants during hot windy days.

2011 Program Budget, Budget Comparisons and Spending Summary. The following table summarizes the Approved Budgets for the December 2005 WSIP, the December 2007 Revised WSIP, the June 2009 Revised WSIP, and the July 2011 Revised WSIP, all of which were approved by the Commission.

Project Category	December 2005 Approved Budget <sup>(1)</sup>	December 2007 Approved Budget <sup>(2)</sup>	June 2009 Approved Budget <sup>(3)</sup>	July 2011 Approved Budget <sup>(7)</sup>
San Joaquin Regional Projects	\$559.3	\$486.2	\$430.1	\$337
Sunol Valley Regional Projects	870.9	957.8	1,054.0	1,063
Bay Division Regional Projects	749.7	796.2	785.1	706
Peninsula Regional Projects	700.5	712.4	894.8	774
San Francisco Regional Projects	164.9	138.2	160.3	194
San Francisco Local Projects	383.2	383.2	599.8	642
Water Supply Projects <sup>(4)</sup>	280.6	265.0	0.0	0.0
Support Projects	81.4	190.8	189.8	254
Program Reserve <sup>(5)</sup>	0.0	0.0	0.0	144
Net Financing <sup>(6)</sup>	552.4	462.4	471.7	472
Program Total <sup><math>\dagger</math></sup>	\$4,342.3	\$4,392.1	\$4,585.6	\$4,586

# TABLE D-1 2011 WSIP BUDGET AND PROJECTED COSTS (IN MILLIONS)

Totals may not add due to independent rounding.

(1) The Commission approved what is referred to as the "December 2005 Approved Budget" on November 29, 2005. This is also referred to in publicly available materials as the "Baseline Budget." The Commission approved what is referred to as the "December 2007 Approved Budget" on February 18, 2008. The Commission approved what is referred to as the "June 2009 Approved Budget" on July 28, 2009. This is also referred

(2)

(3) to in publicly available materials as the "Approved Budget."

(4) Water Supply projects were transferred to the San Francisco Regional and San Francisco Local categories as part of the June 2009 Approved Scopes, Schedules and Budget.

(5) Program Reserve projected cost savings now \$135 million.

(6) Does not include \$107 million of realized bond premium to date.

(7) The Commission approved what is referred to as the "July 2011 Approved Budget" on in June 2011.

Source: SFPUC, Financial Planning

The program level cost variance between the December 2005 Approved Budget and the December 2007 Approved Budget was relatively small (an additional \$49.16 million, or 1.1% increase). In general, the need to compensate for the additional resources needed to address real estate requirements (land acquisition and encroachment removal) and complete delivery activities (program management, project management and environmental review/permitting/mitigation) accounts for this variance.

The variance between the December 2007 Approved Budget and the June 2009 Approved Budget is approximately \$194 million or a 4.4% increase. Significant cost increases in two projects account to a great extent for this projected overall increase in the program cost. The Calaveras Dam Replacement Project and the Harry Tracy Water Treatment Plant Long-Term Improvements Project currently carry an approximate projected variance (June 2009 Approved Budget minus December 2007 Approved Budget) of an additional \$102 million and \$183 million, respectively. The NOA and fisheries issues described above are the main factors increasing the cost of the Calaveras Dam Replacement Project. In the case of the Harry Tracy Water Treatment Plant Long-Term Improvements Project, the cost increase is due to the recent discovery of a new strand of the Sierra Fault at the project site, which is necessitating the relocation of two large treated water reservoirs – work that was not in the original project scope.

There is no variance between the June 2009 Approved Budget and the July 2011 Approved Budget.

A summary of the WSIP budget and appropriations is provided in the following table.

# TABLE D-2 WSIP BUDGET AND SPENDING SUMMARY AS OF MARCH 5, 2012 (IN MILLIONS)

	2011		Unencumbered
	Total	Expended/	Remaining
	Approved	Encumbered	Balance
Regional Projects	\$3,327	\$2,715	\$613
Local Projects <sup>(1)</sup>	642	349	293
Financing Costs <sup>(2)</sup>	472	407	64
Program Reserve <sup>(3)</sup>	144	0	0
Total	\$4,586	\$3,471	\$1,115

(1) Local projects include Water Supply Projects.

(2) Does not include \$107 million of realized bond premium to date.

(3) Program Reserve projected cost savings now \$135 million.

Note: Certain amounts set forth in the table are projections. Actual results may differ materially from these projections. See "FORWARD-LOOKING STATEMENTS" above.

Source: SFPUC, Financial Services

**Program Changes.** The list of projects to be built in the WSIP has not changed significantly since the program was initiated in 2002. Some projects have been combined, some have been split, some have been renamed and only a few have been eliminated or added. These changes, as well as major project scope modifications, are thoroughly documented in the Change of Notice reports submitted to the State (see "–Program Development and Chronology" above). The latest program scope, the June 2011 scope, approved by the Commission on July 12, 2011 is documented in the <u>AB 1823: Notice of Changes to Water System Improvement Program Report</u> submitted to the State on September 1, 2011.

# **Program Status and Performance**

*Work Breakdown Structure*. The WSIP, like most other large infrastructure programs, is managed based on a standardized work breakdown structure ("WBS"). The performance and status of the WSIP is often reported at the phase level of the WBS.

The WSIP WBS includes 9 different phases – Project Management, Planning, Environmental, Right-of-Way, Design, Bid & Award, Construction, Construction Management, and Close-Out. A very brief summary of the work involved in each phase is provided below.

The Project Management Phase involves project-specific oversight and management functions that extend from project initiation to construction completion and start up of new facilities. They include project controls, change and risk management, cost estimating and scheduling, value engineering, document control, communications and project team oversight.

The Planning Phase involves the definition of performance objectives and general design requirements based on the input provided by the client, field investigations and preliminary engineering work. Planning deliverables typically include a Needs Assessment Report, an Alternative Analysis Report and a Conceptual Engineering Report.

The Environmental Phase involves the analyses and review required to comply with CEQA and the work needed to obtain all required permits from local, State and federal resources agencies.

The Right-of-Way Phase involves all real estate activities (e.g., land surveys, property appraisals, legal descriptions, easement agreements, etc.) needed to secure the temporary and permanent property and access rights needed to build, maintain and operate the facilities and improvements included in the program.

The Design Phase involves the various engineering tasks needed to prepare the construction contract documents (drawings and specifications).

The Bid & Award Phase involves the advertisement of construction contracts, the administration of the bidding process and the selection of the lowest, qualified, responsible and responsive bidder for each contract.

The Construction Phase involves all the fieldwork required to build the improvements specified in the construction contract documents. Key construction milestones include: contractor mobilization, testing and start-up, substantial completion, client acceptance of improvements and final completion.

The Construction Management Phase involves a number of oversight functions to monitor and verify the work of construction contractors in the field. Key functions include field inspections and testing, quality assurance, schedule and cost control, claims analysis, contract administration and safety monitoring.

The Close-Out Phase involves the post-construction, administrative tasks needed to complete construction contracts. This often includes negotiating and reaching final agreements on outstanding contract items and verifying that all contract terms have been met.

*Status of WSIP Projects*. Significant progress has been made on the WSIP in recent years. One can assess the overall status of a capital program comprised of multiple projects by looking at the number of projects and the value of these projects in each of the major implementation phases of the program. Table D-3 shows the number of WSIP projects active in each of these phases. The Local Program overall is well into construction, whereas the Regional Program is in the later stage of design and transitioning into construction. The Local Program is further along because the projects in that program are smaller and less complex and require minimal environmental review.

	Number o	of Projects	Value of Projects (in millions)		
Active Phase	Local Program	Regional Program	Local Program	Regional Program	
Planning	2	1	\$56	\$43	
Design	2	3	217	193	
Bid & Award	1	2	64	189	
Construction	4	16	70	2,486	
Close-Out	5	10	65	271	
Completed	26	14	168	171	
Total <sup>†</sup> :	40	46	\$640	\$3,351	

# TABLE D-3STATUS OF WSIP PROJECTS THROUGH MARCH 31, 2012

<sup>†</sup> Totals may not add due to independent rounding.

Source: SFPUC, 3rd quarter Fiscal Year 2011-12 WSIP Quarterly Report

**Performance of WSIP Projects.** The performance of a program can be assessed by comparing planned expenditures against the value of the work completed. Such a comparison is provided in Table D-4. In general, actual performance on the Local and Regional Programs tracks planned performance well. Some delays, however, have occurred in the environmental review of some large water supply projects. These delays have had an impact on the performance of the Environmental Phases and, to some extent, the performance of subsequent phases (Design and Construction). A number of measures are being implemented to mitigate these environmental delays.

# TABLE D-4PERFORMANCE OF WSIP PROJECTS THROUGH MARCH 31, 2012COMPARED TO 2011 APPROVED BUDGET PLAN

	Local Program <sup>(2)</sup>			Program <sup>(3)</sup>
Phase	% Planned	% Completed	% Planned	% Completed
All Phases	83.1%	81.4%	59.3%	56.4%
Project Management	92.6	90.4	74.0	70.7
Planning	100.0	100.0	100.0	99.4
Environmental	100.0	100.0	92.5	90.4
Right-of-Way			92.8	85.9
Design	100.0	100.0	97.3	94.7
Bid and Award	96.8	94.0	91.2	89.0
Construction Management	84.0	82.0	52.6	49.4
Construction	80.2	78.4	53.0	50.1
Close-Out	74.8	67.4	31.4	15.8
Program Management (1)				

(1) The WSIP Regional Program tracks an additional Program Management phase.

(2) Local Program percentages do not include Local Water Supply projects.

(3) Regional Program percentages do not include Support (formerly System-Wide) projects.

Source: SFPUC, 3rd quarter Fiscal Year 2011-12 WSIP Quarterly Supplemental Report.

# Program Risk Management

2007 Risk Assessment. In 2007, the SFPUC commissioned a comprehensive programmatic risk assessment (the "2007 Risk Assessment") to identify risk factors and exposures that could lead to schedule delays and cost escalation as the WSIP moves forward from planning and design into construction.

The Risk Assessment concluded that the risks representing the greatest potential cost liabilities for the WSIP were: (1) general inflation of material and labor costs; (2) contracting (i.e., ability to attract enough contractors to bid on WSIP projects); (3) potential delays in the environmental review process; and (4) the lack of a well established construction management organization.

*Subsequent Developments and Mitigation Measures.* Since 2007, the risk factors identified by the 2007 Risk Assessment have been mitigated by certain developments, and by actions taken by the SFPUC, including the following:

• The SFPUC has experienced significantly lower than anticipated construction costs due to a highly competitive bidding environment for construction projects.

• The scheduling risks associated with the environmental review of projects were significantly reduced following certification of the WSIP Preliminary Environmental Impact Report in October 2008 (as no appeals to the San Francisco Board of Supervisors or legal actions were filed during the challenge period). Significant progress has also been made on project-specific environmental reviews.

• The SFPUC implemented a new construction management approach, organization structure, contracting strategy, operations plan, business processes, procedures and customized Management Information System.

• The SFPUC formulated a WSIP Risk Mitigation Action Plan, which provides comprehensive step-by-step actions to address each of the risks described in the 2007 Risk Assessment. Progress made on implementation of the plan is reported in the WSIP Quarterly Reports.

• The SFPUC developed a risk management program that focuses on the WSIP construction phase, and involves the identification, assessment, analysis and management of risks associated with construction activities.

• The SFPUC adopted an enterprise risk management software tool to evaluate the effects of risk systematically across the WSIP program and track and monitor mitigation actions more effectively and efficiently.

# APPENDIX E

# SFPUC WATER ENTERPRISE FINANCIAL STATEMENTS

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**Financial Statements** 

June 30, 2011 and 2010

(With Independent Auditors' Report Thereon)

June 30, 2011 and 2010

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KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

# **Independent Auditors' Report**

The Honorable Mayor and Board of Supervisors City and County of San Francisco

We have audited the accompanying financial statements of the San Francisco Water Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City), as of and for the years ended June 30, 2011 and 2010, as listed in the table of contents. These financial statements are the responsibility of the Enterprise's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing the audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in note 1, the financial statements of the Enterprise are intended to present the financial position, and the changes in financial position and cash flows of only that portion of the City that is attributable to the transactions of the Enterprise. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2011 and 2010, the changes in its financial position, or, where applicable, the cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the San Francisco Water Enterprise of the City and County of San Francisco, California as of June 30, 2011 and 2010, and the changes in its financial position and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

In accordance with *Government Auditing Standards*, we have also issued our report dated October 28, 2011, on our consideration of the Enterprise's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, 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* and should be considered in assessing the results of our audit.

The management's discussion and analysis on pages 3 through 19 is not a required part of the basic financial statements but is supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.



October 28, 2011

Management's Discussion and Analysis

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

This section presents management's analysis of the San Francisco Water Enterprise's (the Enterprise) financial condition and activities as of and for the years ended June 30, 2011 and 2010. Management's Discussion and Analysis (MDA) is intended to serve as an introduction to the Enterprise's financial statements. This information should be read in conjunction with the audited financial statements that follow this section. All amounts, unless otherwise noted, are expressed in thousands of dollars.

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

- Organization and Business
- Overview of the Financial Statements
- Financial Analysis
- Capital Assets and Debt Administration
- Next Year's Rates
- Request for Information

# **Organization and Business**

The San Francisco Public Utilities Commission (SFPUC or the Commission) is an agency of the City and County of San Francisco (the City) that is responsible for the maintenance, operation, and development of three utility enterprises, Wastewater, Hetch Hetchy Water and Power, and Water (the Enterprise). The Water Enterprise collects, transmits, treats, and distributes high-quality drinking water to a total population of approximately 2.5 million people, including retail customers in the City and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The Enterprise delivered approximately 218.8 millions of gallons per day of water in the year ended June 30, 2011. Approximately two-thirds of the water delivered by the Enterprise is to wholesale customers. Retail customers are primarily San Francisco consumers and include residential, commercial, industrial, and governmental users. The Enterprise recovers cost of service through user fees. Wholesale customers include cities, water districts, one private utility, and one non-profit university. Service to these customers is provided pursuant to the 25-year Water Supply Agreement (WSA) commencing on July 1, 2009, which establishes the basis for determining the costs of wholesale service.

# **Overview of the Financial Statements**

The Enterprise's financial statements include:

*Statements of Net Assets* present information on the Enterprise's assets and liabilities as of year-end, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Enterprise is improving or deteriorating.

While the *Statements of Net Assets* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Revenues, Expenses, and Changes in Net Assets* present the results of the Enterprise's operations over the course of the fiscal year and information as to how the net assets changed during the year. These statements can be used as an indicator of the extent to which the Enterprise has successfully

Management's Discussion and Analysis June 30, 2011 and 2010 (Dollars in thousands, unless otherwise stated)

recovered its costs through user fees and other charges. All changes in net assets 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 these statements from some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expenses of employee earned but unused vacation leave.

The *Statements of Cash Flows* present changes in cash and cash equivalents resulting from operational, capital, non-capital, and investing activities. These statements summarize 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 exclude non-cash accounting measures of depreciation or amortization of assets.

The *Notes to Financial Statements* provide information that is essential to a full understanding of the financial statements that is not displayed on the face of the financial statements.

# **Financial Analysis**

# Financial Highlights for Fiscal Year 2011

- Total assets of the Enterprise exceeded total liabilities by \$396,258.
- Net assets decreased by \$19,426 or 4.7% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$615,535 or 33.0% to \$2,479,888.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$23,018 or 9.3% to \$271,387.
- Operating expenses, excluding interest expense and other non-operating expenses, decreased by \$16,043 or 5.8% to \$261,927.

# Financial Highlights for Fiscal Year 2010

- Total assets of the Enterprise exceeded total liabilities by \$415,684.
- Net assets decreased by \$46,616 or 10.1% during the fiscal year.
- Capital assets, net of accumulated depreciation, increased by \$363,093 or 24.2% to \$1,864,353.
- During the fiscal year, charges for services, excluding interest and investment income, rental income, other operating and non-operating revenues, increased by \$705 or 0.3% to \$248,369.
- Operating expenses, excluding interest expense and other non-operating expenses, increased by \$29,655 or 11.9% to \$277,970.

Management's Discussion and Analysis

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

# **Financial Position**

The following table summarizes changes in the Enterprise's changes in net assets.

#### Table 1

#### **Comparative Condensed Net Assets**

#### June 30, 2011, 2010, and 2009

		2011	2010	2009	2011 – 2010 change	2010 – 2009 change
Current and other assets Capital assets, net of accumulated	\$	1,661,236	1,136,966	269,975	524,270	866,991
depreciation		2,479,888	1,864,353	1,501,260	615,535	363,093
Total assets	_	4,141,124	3,001,319	1,771,235	1,139,805	1,230,084
Revenue and capital appreciation bonds		3,189,053	2,249,179	936,506	939,874	1,312,673
Certificates of participation		122,115	122,496	_	(381)	122,496
Commercial paper		150,000	—	229,600	150,000	(229,600)
Other liabilities	_	283,698	213,960	142,829	69,738	71,131
Total liabilities	_	3,744,866	2,585,635	1,308,935	1,159,231	1,276,700
Net assets:						
Invested in capital assets, net of						
related debt		333,386	319,581	372,421	13,805	(52,840)
Restricted for debt service		30,840	12,073	11,941	18,767	132
Restricted for capital projects		19,163	4,346	1,209	14,817	3,137
Unrestricted	_	12,869	79,684	76,729	(66,815)	2,955
Total net assets	\$	396,258	415,684	462,300	(19,426)	(46,616)

# Net Assets, Fiscal Year 2011

For the year ended June 30, 2011, the Enterprise's assets exceeded liabilities by \$396,258. Total net assets decreased from prior year by \$19,426 or 4.7% (see Table 1). The decline in net assets was the result of \$1,139,805 increase in total assets offset by a \$1,159,231 increase in total liabilities. Investment in capital assets, net of related debt, increased from the prior year's \$319,581 to \$333,386 by \$13,805 or 4.3% primarily due to the \$11,747 transfer of fixed assets from the Fire Department's Auxiliary Water Supply System (AWSS) to the Enterprise.

Current and other assets are primarily comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the "Balancing Account") in accordance with the provisions set forth in the Water Supply Agreement effective July 1, 2009. Balances due are recovered in future year rates.

Management's Discussion and Analysis

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

During the fiscal year 2011, current and other assets increased by \$524,270 or 46.1%. The increases included \$506,068 in restricted and unrestricted cash and investment from bond issuance of \$979,355 and \$6,934 in receivables from the wholesale customers that was consistent with the new Water Supply Agreement terms. Wholesale customers are billed based on the estimated costs of service and usage, which are adjusted to actual costs and usage at year end. As of June 30, 2011, the ending balance was \$41,026 owed to the Enterprise. Refer to Note 10, Wholesale Balancing Account, for additional details. Inventory increased by \$6,158 due to the transfer of AWSS assets from the Fire Department. Other increases included bond issuance costs of \$5,210, restricted receivables of \$3,920 primarily due to interest subsidies receivables from the Internal Revenue Service on taxable Build America bonds, \$3,214 in prepaid expenses was explained by \$2,813 for the Pacifica Recycled Water project and \$401 for lease agreement with the San Francisco Recreation and Park Commission for the use of Civic Center Garage, and \$893 in capacity fee receivables. The increases were offset by decreases of \$4,224 in receivables from Wastewater and Hetch Hetchy Enterprises as a result of construction cost reimbursement for 525 Golden Gate Headquarters Building, \$3,479 in receivables for charges for services, as a result of unbilled revenue accrual for wholesale customers, \$372 from the High Efficiency Toilet Grant and the EPA Contamination Warning System Grant, and \$52 in interest receivables from pooled investments.

Total liabilities increased by \$1,159,231 or 44.8% primarily due to the issuance of \$939,493 in revenue bonds net of principal payment and \$150,000 in commercial paper. Increases also included \$30,791 in payables from restricted assets for the Water System Improvement Program, the Advanced Meter Infrastructure System, and the 525 Golden Gate Headquarters, \$14,716 in other post-employment benefits obligation as a result of a higher annual required contribution, \$13,614 in interfund payable which included \$13,638 due to Hetch Hetchy Enterprise for water storage and transmission facilities improvements, \$12,676 in bond interest payable, \$3,459 in deferred credit including \$1,100 in grant advance, and \$1,800 of rent and utility deposits, \$2,480 in accounts payable from higher construction, repair and replacement activities, and \$118 in accrued payroll. These increases were offset by decreases of \$4,036 in arbitrage liability due to a payment made to the Internal Revenue Service in fiscal year 2011, \$2,750 in damage claims liability based on actuarial estimates, \$659 reduction in pollution remediation liability for the Baylands Peninsula Sportsman Club project as a result of completion of remediation, \$419 in workers' compensation, and \$252 in accrued vacation and sick leave.

# Net Assets, Fiscal Year 2010

For the year ended June 30, 2010, the Enterprise's assets exceeded liabilities by \$415,684, representing a decrease of \$46,616 or 10.1% from the prior year (see Table 1). The decline in net assets was the result of an additional \$1,230,084 in total assets offset by a \$1,276,700 increase in total liabilities. Investment in capital assets, net of related debt, decreased from prior year's \$372,421 to \$319,581 or 14.2% due to the depreciation and repayment of debt.

Current and other assets primarily comprised of restricted and unrestricted balances of cash, receivables for water deliveries and services, interfund receivables due from other governmental agencies, and inventory. This also includes receivables which represent cumulative amounts due from the wholesale customers to match revenues with the Enterprise's costs of providing service (the "Balancing Account") in accordance with the provisions set forth in the Water Supply Agreement effective July 1, 2009. Balances due are recovered in future year rates.

Management's Discussion and Analysis

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

During the fiscal year 2010, current and other assets increased by \$866,991 or 321.1%, as a result of \$853,084 increase in restricted cash and investments, and restricted interest receivables from planned bond issuances during the year. The bond issuance costs increased by \$10,537. Unrestricted cash with City Treasury was used to pay down current contractual obligations and other liabilities, thereby resulting in a \$17,455 decline in unrestricted cash balance. Inventories decreased by \$58, and total receivables increased by \$20,830, primarily resulting from \$10,157 net increase in unrestricted interest receivables, due from other funds and advances for the SFPUC headquarters building, \$3,491 increase in receivables for charges for services mainly from City retail ratepayers, net of the current year provision for uncollectible accounts, in part as a result of an average rate adjustment of 15% that went into effect at the beginning of the fiscal year, \$661 receivables increase in due from other governmental agencies from the High Efficiency Toilet Grant, and increase of \$6,521 in receivables from the wholesale customers consistent with the new Water Supply Agreement terms. Wholesale customers are billed based on the estimated costs of service and usage, which are adjusted to actual costs and usage at year end. As of June 30, 2010, the ending balance was \$34,092 owed to the Enterprise. Refer to Note 10, Wholesale Balancing Account, for additional details.

Total liabilities increased by \$1,276,700 or 97.5% primarily due to the issuance of \$1,435,169 in revenue bonds and certificates of participation offset by principal payments, \$34,004 in payables from restricted assets from the Water System Improvement Program and the 525 Golden Gate Avenue Headquarters Project, and \$8,651 in interest payable from new bonds issued, offset by a refunding of \$229,600 in commercial paper through the issuance of new bonds. Other factors contributing to the increase in total liabilities are \$20,099 in damage claims liability due to updated liability reserve estimates related to pending Federal and State cases regarding breach of contract claims by Mitchell Engineering (see Subsequent Events, note 15(d)), \$14,631 in other post-employment benefits obligation based on actuarial estimates, \$878 in accrued payroll and other liabilities, \$373 in accrued vacation and sick leave due to the wellness program, and \$288 in arbitrage rebate payable due to higher yield, offset by decreases of \$4,617 in accounts payable of operating funds, as project spending this year was more funded with restricted bond funds than with operating funds in comparison to prior fiscal year, \$2,653 in pollution remediation obligation due to liability reduction in the Baylands Peninsula Sportsman Club project as a result of completion of remediation process, and \$523 in workers' compensation.

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# **Results of Operations**

The following table summarizes the Enterprise's revenues, expenses, and changes in net assets.

# Table 2

#### Comparative Condensed Revenues, Expenses and Changes in Net Assets

#### Years ended June 30, 2011, 2010, and 2009

	 2011	2010	2009	2011 – 2010 change	2010 – 2009 change
Revenues:					
Charges for services	\$ 271,387	248,369	247,664	23,018	705
Rents and concessions	9,388	8,584	9,399	804	(815)
Other operating revenues	7,620	8,265	8,718	(645)	(453)
Interest and investment income	17,283	9,823	7,088	7,460	2,735
Other non-operating revenues	 31,499	5,851	7,202	25,648	(1,351)
Total revenues	 337,177	280,892	280,071	56,285	821
Expenses:					
Operating expenses	261,927	277,970	248,315	(16,043)	29,655
Interest expense	100,875	47,272	28,847	53,603	18,425
Non-operating expenses	 2,121	1,773	799	348	974
Total expenses	 364,923	327,015	277,961	37,908	49,054
Income (loss) before transfers	(27,746)	(46,123)	2,110	18,377	(48,233)
Capital contribution	26,154	_		26,154	
Transfers to City and County					
of San Francisco	 (17,834)	(493)	(1,143)	(17,341)	650
Changes in net assets	(19,426)	(46,616)	967	27,190	(47,583)
Net assets at beginning of year	 415,684	462,300	461,333	(46,616)	967
Net assets at end of year	\$ 396,258	415,684	462,300	(19,426)	(46,616)

# Results of Operations, Fiscal Year 2011

The Enterprise's total revenues for the year of \$337,177 represented an increase of \$56,285 or 20.0% compared to the prior year (see Table 2). Increases included \$25,648 from other non-operating revenues, \$23,018 from charges for services, \$7,460 from interest and investment income, and \$804 from rent and concessions, offset by a decrease of \$645 in other operating revenues of installation services.

Other non-operating revenues increased by \$25,648 or 438.4% primarily due to interest subsidies of \$21,647 from the Internal Revenue Service for Build America bonds issued during the year in connection with the 2010 Series B and Series E. Charges for services increased by \$23,018 or 9.3% due to increased revenues from an average 15% of planned retail rate increase along with an average 15.2% of planned wholesale rate increase,

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offset by reduced consumption and a decrease in unbilled revenue accrual from wholesale customers. Interest and investment income increased by \$7,460 or 75.9% as a result of higher cash balance from the issuance of revenue bonds and commercial paper during the year.

The Enterprise's total expenses increased by \$37,908 or 11.6% to \$364,923 over the prior year (see Table 2), due to increases of \$53,603 in interest expense as a result of the issuance of revenue bonds and commercial paper, \$348 in non-operating expenses mainly for the Water Conservation Rebate Program, offset by a decrease of \$16,043 in operating expenses. The decrease of \$16,043 in operating expenses were due to decreases of \$19,460 in judgments & claims based on actuarial estimate, \$8,127 in non-capitalized project expenses, \$1,266 in services provided by other departments, and \$146 in general and administrative expenses. These decreases were offset by increases of \$6,181 in depreciation, \$3,185 in personal services due to a decrease of \$1,194 in salaries offset by an increase of \$4,379 in retirement and health care costs and contributions, \$2,499 in contractual services primarily for building and structure maintenance, and \$1,091 in materials and supplies for various maintenance projects.

The total transfers out has increased by \$17,341 mainly due to a \$13,638 transfer to the Hetch Hetchy Enterprise for certain up-country water storage and transmission facilities improvements. The Enterprise also transferred \$2,643 to the Recreation and Park and the Department of Public Works for the Enterprise's landscape and irrigation projects.

# **Results of Operations, Fiscal Year 2010**

The Enterprise's total revenues for the year of \$280,892 represented an increase of \$821 or 0.3% compared to the prior year (see Table 2). Charges for services increased by \$705 or 0.3%, interest and investment income increased by \$2,735, offset by decreases of \$1,351 in other non-operating revenues, \$815 in rents and concessions, and \$453 in other operating revenues.

Revenues from the sale of water to retail customers increased \$3,463 or 3.2% largely attributable to an average 15% increase in retail rates less partially offsetting reduction in consumption, in part due to successful conservation campaign, the economy and weather patterns. There was also a wholesale rate increase of 15.7% that was partially offset by a reduction of 8.9% in consumption due to conservation and economic downturn. The wholesale rates are adopted annually to recover costs. Additionally, sales to suburban non-resale customers decreased by \$1,460, while water sales to municipal customers increased by \$274 based on consumption. The Balancing Account due from wholesale customers increased \$6,521 from the prior year, based on the difference between revenues billed and costs of service. Interest and investment income increased by \$2,735 or 38.6% as a result of higher cash balance from the issuance of new revenue bonds and certificates of participation. Other non-operating revenues decreased by \$1,351 or 18.8% primarily due to the \$2,544 gain in the prior year from the sale of surplus land.

The Enterprise's total expenses increased by \$49,054 or 17.6% to \$327,015 over prior year (see Table 2), due to increases of \$29,655 in operating expenses, \$18,425 in interest expense, and \$974 in non-operating expenses primarily attributable to the Water Conservation Rebate Program. Increases in operating expenses were due to increases of \$23,026 in judgments & claims including \$6,736 paid in fiscal year 2010 and \$20,099 of accrual based on updated liability reserve estimates including the pending Federal and State cases regarding breach of contract claims, \$7,471 in services provided by other departments related to Hetch Hetchy water assessment fees

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and increased billed work orders from City Attorney's Office, \$3,471 in depreciation for additional capital assets, \$1,309 in personal services due to decreases of \$385 in salaries and \$1,694 in retirement and health care costs due to higher required contributions, and \$77 in materials and supplies for various maintenance projects. Increase in interest expense was mainly attributable to an increase of \$1,312,415 in revenue bonds. These increases were offset by decreases of \$4,984 in other operating expenses, \$532 in contractual services from building and structure maintenance, and \$92 in bad debt expense resulting from reclassification of bad debt as a direct write-off of charges for services. Decreases in other operating expenses were mainly due to decreases in non-capitalized project expenses and capital project write-offs and decrease in indirect cost allocation paid to the General Fund (see note 12).

# **Capital Assets and Debt Administration**

# **Capital Assets**

The following table summarizes changes in the Enterprise's capital assets.

#### Table 3

#### Capital Assets, Net of Depreciation

#### Years ended June 30, 2011, 2010, and 2009

	_	2011	2010	2009	2011 – 2010 change	2010 – 2009 change
Facilities, improvements, machinery,						
and equipment	\$	1,223,311	1,054,627	935,581	168,684	119,046
Intangible assets		9,191	4,652	_	4,539	4,652
Land		18,812	17,707	18,386	1,105	(679)
Construction work in progress		1,228,574	787,367	547,293	441,207	240,074
Total	\$	2,479,888	1,864,353	1,501,260	615,535	363,093

# Capital Assets, Fiscal Year 2011

The Enterprise has net capital assets of \$2,479,888 invested in a broad range of utility capital assets as of June 30, 2011 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of depreciation, increased by \$615,535 from prior year as a result of increases of \$441,207 or 56.0% in construction in progress, \$168,684 or 16.0% in structures, buildings and equipment, \$4,539 or 97.6% in intangible assets, and an increase of \$1,105 for purchase of land. The increase in capital assets is consistent with the Enterprise's implementation of the ten-year capital plan, including the Water System Improvement Program (WSIP).

The Enterprise recorded \$5,512 in intangible assets and \$973 in intangible assets related depreciation during the fiscal year. The intangible assets addition composed of \$5,017 in Supervisory Control & Data Acquisition (SCADA) System software and \$495 in San Francisco Online Invoicing System software. With the adoption of

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GASB Statement 51, the Enterprise reclassified \$4,652 in intangible assets as of June 30, 2010, composed of \$3,973 in Customer Care & Billing computer software and \$679 in easements.

In May 2010, the City and County of San Francisco Board of Supervisors and Mayor approved the transfer of costs of operating, maintaining and improving the auxiliary water supply system (AWSS) from the Fire Department to the Enterprise. In the fiscal year 2011, the Fire Department transferred \$11,747 in AWSS capital assets to the Enterprise comprising of cisterns, pump stations, storage tanks, valves and vaults.

Major additions to construction work in progress during the year ended June 30, 2011 include:

Bay Division Pipeline (BDPL) Reliability Upgrade	\$ 101,469
New Irvington Tunnel	62,068
525 Golden Gate Headquarters	61,519
Bay Division Pipeline Reliability Upgrade - Tunnel	58,096
Sunol Valley Water Treatment Plant Expansion & Treated Water Reservoir	46,638
San Joaquin Pipeline System	27,691
Irvington Tunnel Alternatives - Alameda Siphon #4	24,812
Tesla Treatment Facility	23,768
Lake Merced Pump Station Upgrade	19,711
New Crystal Springs Bypass Tunnel	19,023
University Mound Reservoir - Upgrade (North Basin)	18,420
Crystal Springs/San Andreas Transmission Upgrade	17,397
Advanced Meter Infrastructure System	17,344
Calaveras Dam Replacement	16,803
Pulgas Balancing Reservoir Rehab - Pulgas Phase 3	15,202
Harry Tracy Water Treatment Plant Long Term Improvements	13,981
San Antonio Pump Station Upgrade	7,405
Crystal Springs pipeline #2 Replacement	6,838
Baden and San Pedro Valve Lot	6,574
San Andreas #3 Pipeline Installation	5,861
Lower Crystal Springs Dam Improvements	5,803
Environmental Impact Project - Habitat Restoration Program	5,187
Other project additions individually below \$5,000	 77,477
	\$ 659,087

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Major facilities, improvements, intangible assets, machinery and equipment placed in service, including transfers of completed projects from construction work in progress, during the year ended June 30, 2011 include:

Tesla Treatment Facility - UV Building	\$ 31,662
San Andreas Pipeline #3	28,334
Tesla Treatment Facility - Steel Pipes	21,996
San Joaquin Pipeline Rehab	15,440
Tesla Treatment Facility - UV Reactor & Valve Vault Valves	12,441
Auxiliary Water Supply System Infrastructure	11,744
Tesla Treatment Facility - Chemical Building	10,457
Baden Pump Station - Pumps, Motors, Drives and Vibration Monitoring System	9,912
Tesla Treatment Facility - San Joaquin pipeline Valves & Vault	7,797
SCADA Software & Hardware	5,018
Other project additions individually below \$5,000	 77,174
	\$ 231,975

### Water System Improvement Program

As of June 30, 2011, the SFPUC's Water Enterprise is half-way completed with its multi-billion dollar, multiyear program to upgrade the Hetch Hetchy Regional and Local Water Systems, known as the Water System Improvement Program (WSIP). The WSIP delivers capital improvements that enhance the Enterprise's ability to provide reliable, affordable, high quality drinking water to its twenty-seven wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, collectively serving some 1.7 million people outside of San Francisco, as well as another 800,000 retail customers in San Francisco, in an environmentally sustainable manner. The program is structured to cost effectively meet water quality requirements, improve seismic and delivery reliability, and meet long-term water supply objectives.

The program is on target to achieve an overall completion date of December 2015, with construction phase started in early 2009. As of June 30, 2011, there are 2 regional projects in Planning Phase, 5 in Design Phase, 1 in Bid & Award Phase, 20 in Construction phase, 4 in Close-Out phase, and 14 regional projects are completed.

Total cost included \$4.1 billion for capital projects and \$0.5 billion for net financing costs. To date, the entire amount is fully appropriated for the WSIP, of which approximately \$1.6 billion of project appropriations have been expended through fiscal year ended June 30, 2011. To help meet this funding need, additional bonds sales are planned. Additional details regarding the WSIP are available on the Enterprise's web site at www.sfwater.org.

### 525 Golden Gate Avenue Headquarters Building

As of June 30, 2011 the Enterprise has incurred \$80,933 in construction costs for the 525 Golden Gate Avenue Headquarters project. The building is intended to consolidate divisions of the San Francisco Public Utilities Commission that are currently renting space at multiple locations in the Civic Center. Demolition of the existing

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site was completed in June 2009. Construction started in January 2010 with an expected completion date of June 2012.

### Advanced Meter Infrastructure System

The SFPUC is implementing the Advanced Meter Infrastructure System (AMI), which will largely eliminate manual meter reading field visits, improve customers' access to hourly usage information, facilitate the timely detection of tampering, theft and leaks, while enhancing usage or flow-tracking. The estimated total capital cost of this project is \$64,100, with Phase 1 implementation including 58,006 meter replacements throughout fiscal year 2010, and Phase 2 implementation replacing 120,000 meters with a projected completion date of December 2012.

### Capital Assets, Fiscal Year 2010

The Enterprise has net capital assets of \$1,864,353 invested in a broad range of utility capital assets as of June 30, 2010 (see Table 3). The investment in capital assets includes land, facilities, improvements, water treatment plants, aqueducts, water transmission, distribution mains, water storage facilities, pump stations, water reclamation facilities, machinery and equipment. The Enterprise's net revenue and long-term debt are used to finance capital investments. Capital assets, net of depreciation, increased from prior year as a result of increases of \$240,074 or 43.9% in construction work in progress, \$123,698 or 13.2% in structures, buildings, equipment and intangible assets, and a decrease of \$679 in land and rights-of-way due to reclassification to intangible assets in fiscal year 2010. The increase in capital assets is consistent with the Enterprise's implementation of the ten-year capital plan, including the WSIP. As of June 30, 2010, the Enterprise has invested \$28,195 in construction costs for the headquarters at 525 Golden Gate Avenue. The Enterprise adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*, in fiscal year 2010. Intangible assets were separated as a major category in the fiscal year ended June 30, 2010.

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Major additions to construction work in progress during the year ended June 30, 2010 include:

Tesla Treatment Facility	\$ 58,641
New Crystal Springs Bypass Tunnel	40,551
Bay Division Pipeline (BDPL) Reliability Upgrade - Pipeline	35,054
Irvington Tunnel Alternatives - Alameda Siphon No. 4	21,356
University Mound Reservoir - Upgrade (North Basin)	20,404
San Andreas No. 3 Pipeline Installation	16,695
Lake Merced Pump Station Upgrade	14,580
Bay Division Pipeline (BDPL) Reliability Upgrade - Tunnel	14,316
Harry Tracy Water Treatment Plant Long Term Improvements	14,111
Baden and San Pedro Valve Lot	13,537
Calaveras Dam Replacement	10,628
San Joaquin Pipeline System	10,585
Irvington Tunnel Alternatives - New Irvington Tunnel	9,072
Bay Division Pipeline (BDPL) No. 3 & 4 Cross Connection	8,533
Crystal Springs/San Andreas Transmission Upgrade	7,364
Rehabilitation of Existing San Joaquin Pipelines	7,256
Harry Tracy Water Treatment Plant Short Term Improvement - Phase 3	7,074
525 Golden Gate Avenue Headquarters Building	6,745
Mclaren Park Pump Station Upgrade	6,541
Sunol Valley Water Treatment Plant Expansion & Treated Water Reservoir	5,763
North University Mound System Upgrade	5,027
Other project additions individually below \$5,000	83,432
	 · · · · · · · · · · · · · · · · · · ·
	\$ 417,265

Major structures, buildings and equipment, and intangible assets placed in service during the year ended June 30, 2010 include:

Tesla Treatment Facility - Steel Pipes	\$ 19,731
Stanford Heights Reservoir - Building/Reservoir	18,872
Harry Tracy Water Treatment Plant - Filters	12,273
Alemany Pump Station Upgrade - Electrical System	10,113
Harry Tracy Water Treatment Plant - Genset	9,893
Harry Tracy Water Treatment Plant - Flocculation Basins	8,153
Alemany Pump Station Upgrade - Mechanical System	7,737
Alemany Pump Station Upgrade - Building	7,631
North University Mound System Upgrade - Pipeline	6,976
Other items individually below \$5,000	 74,450
	\$ 175,829

#### Water System Improvement Program

The Enterprise is in the middle of a multi-billion dollar, multi-year program to upgrade its Regional and Local Water Systems, known as the Water System Improvement Program (WSIP). The WSIP will deliver capital

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(Dollars in thousands, unless otherwise stated)

improvements that enhance the Enterprise's ability to provide reliable, affordable, high quality drinking water to its twenty-seven wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in the City and County of San Francisco, in an environmentally sustainable manner. The program is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply objectives for the year 2030.

The program is on target to achieve an overall completion date of December 2015. The transition of the WSIP's larger regional projects to the construction phase started in early 2009. As of June 30, 2010, there are 2 regional projects in Planning Phase, 7 in Design Phase, 3 in Bid & Award Phase, 14 in Construction phase, 5 in Close-Out phase, 10 regional projects are completed, and 5 regional projects in multiple phases.

The total estimated cost for the WSIP is \$4.6 billion, including \$4.1 billion for capital projects and \$0.5 billion for net financing costs. To date, the entire amount is fully appropriated for the WSIP, of which approximately \$1.1 billion of project appropriations have been expended through fiscal year ended June 30, 2010. To help meet this funding need, additional bonds sales are planned.

Additional details regarding the WSIP are available in the Annual Reports published on the Enterprise's web site at <u>www.sfwater.org</u>.

# 525 Golden Gate Avenue Headquarters Building

As of June 30, 2010 the Enterprise has incurred its 73% share or \$28,195 in construction costs for the 525 Golden Gate Avenue Headquarters project. The building is intended to consolidate divisions of the San Francisco Public Utilities Commission that are currently renting space at multiple locations in the Civic Center. Demolition of the existing site was completed in June 2009. Construction started in January 2010 with an expected completion date of June 2012.

### Advanced Meter Infrastructure System

Over the next three years, the SFPUC will be in the process of implementing the Advanced Meter Infrastructure System (AMI), which will largely eliminate manual meter reading field visits, improve customers' access to hourly usage information, facilitate the timely detection of tampering, theft and leaks, while enhancing usage or flow-tracking. The estimated total capital cost of this project is \$64.1 million, with Phase 1 implementation including 57,000 meter replacements throughout fiscal year 2010, and Phase 2 implementation replacing 123,000 meters with a projected completion date of February 2012, as of year-end close June 30, 2010.

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#### **Debt** Administration

As of June 30, 2011, the Enterprise has \$3,461,168 total debt outstanding, an increase of \$1,089,493 over the prior year, as shown below in Table 4. More detailed information about the Enterprise's debt activity is presented in notes 6, 7, 8 and 9 to the financial statements.

#### Table 4

#### **Outstanding Debt, Net of Amortized Costs**

#### June 30, 2011, 2010, and 2009

	_	2011	2010	2009	2011 – 2010 change	2010 – 2009 change
Revenue bonds Capital appreciation bonds Commercial paper Certificates of participation	\$	3,184,898 4,155 150,000 122,115	2,245,301 3,878  122,496	932,886 3,620 229,600	939,597 277 150,000 (381)	1,312,415 258 (229,600) 122,496
Total	\$	3,461,168	2,371,675	1,166,106	1,089,493	1,205,569

The Enterprise has commercial paper notes of \$150,000 outstanding at June 30, 2011 and none in the previous year. Total debt outstanding at June 30, 2011 consisted of \$3,184,898 in fixed-rate long-term revenue bonds, \$4,155 (accreted value) in capital appreciation bonds, and \$122,115 in certificates of participation. The change in total debt outstanding was due to issuance of \$979,355 in revenue bonds and \$150,000 commercial paper, retirement of revenue bond principal, accretion of capital appreciation bonds, and amortization of bond discounts, bond premium and refunding loss. See notes 7 and 9 for more details.

*Credit Ratings and Bond Insurance* – The Enterprise carried underlying ratings of "Aa2" and "AA-" from Moody's and Standard & Poor's (S&P) at June 30, 2011 and 2010, respectively.

**Debt Service Coverage** – Pursuant to the Amended and Restated Indenture, the Enterprise is required to collect sufficient net revenues each fiscal year, together with any Enterprise funds (except Bond Reserve Funds) which are available for payment of debt service and are not budgeted to be expended, at least equal to 1.25 times annual debt service for said fiscal year. During fiscal years 2011 and 2010, the Enterprise's net revenues, together with fund balances available to pay debt service and not budgeted to be expended, were sufficient to meet the rate covenant requirements under the Enterprise's Amended and Restated Indenture.

**Debt** Authorization – Pursuant to the Charter, the Enterprise can incur indebtedness upon two-thirds vote of the Board of Supervisors, as approved by voters in Proposition E in November 2002. As of June 30, 2011, the Board of Supervisors has authorized the issuance of \$3,097,131 in revenue bonds under Proposition E with \$1,422,655 issued against this authorization. The Enterprise can also incur indebtedness of up to \$1,628,000 for improvements to the water system pursuant to Proposition A that was approved by the voters in November 2002. As of June 30, 2011, \$1,331,815 of the \$1,628,000 Proposition A authorized bonds was issued. The Enterprise is also authorized to issue up to \$500,000 in commercial paper. As of June 30, 2011, there was \$150,000 in taxable commercial paper outstanding, and as of June 30, 2010, there was no commercial paper outstanding.

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*Cost of Debt Capital* – The Enterprise's outstanding long-term debt has coupon interest rates ranging from 2.0% to 6.9% as of June 30, 2011 and ranged from 2.0% to 6.0% as of June 30, 2010. The Enterprise's short-term debt has interest rates ranging from 0.2% to 0.4% during fiscal year 2011. In the prior year, the Enterprise's short-term debt has interest rates ranging from 0.3% to 0.5%. More information about the Enterprise's debt activities is presented in notes 6, 7, 8, and 9 to the financial statements.

### Next Year's Rates

Retail water rate increases of 15.0%, 12.5%, 12.5%, 6.5% have been approved for fiscal years ending June 30, 2011 through 2014, respectively. Wholesale water rates are adopted annually; Commission approved a 15.2% increase for the fiscal year ended June 30, 2011 on April 13, 2010. The Commission also approved a 38.4% increase for the fiscal year ending June 30, 2012 on May 10, 2011.

### Rate Setting Process

Proposition E, as approved by the Voters in November 2002, amended the City Charter by adding the new Article VIIIB, entitled "Public Utilities," which changed the Commission's ability to issue new revenue bonds and set retail water rates. The Commission is required to:

- Establish rates, fees, and charges based on cost of service;
- Retain an independent rate consultant to conduct cost of service studies at least every five years;
- Consider establishing new connection fees;
- Consider conservation incentives and lifeline rates;
- Adopt a rolling five-year forecast annually; and
- Establish a Rate Fairness Board.

Wholesale customer rates were set pursuant to the Master Water Sales Contract through June 30, 2009 when the contract expired. A new agreement was negotiated between the Commission and the wholesale customers represented by the Bay Area Water Supply and Conservation Agency (BAWSCA). The term of the new Water Supply Agreement (WSA) began on July 1, 2009 and shall end on June 30, 2034. Two 5-year extension options are also available.

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(Dollars in thousands, unless otherwise stated)

The following table is the Enterprise's average rate adjustments since July 1, 2004:

	Approved a rate adjust	0
	Retail	Wholesale
Effective date:		
July 1, 2004	0.0 %	2.7 %
July 1, 2005	15.0	(9.7) <sup>1</sup>
July 1, 2006	15.0	18.8
July 1, 2007	15.0 <sup>2</sup>	6.3
July 1, 2008	15.0	10.0
July 1, 2009 <sup>3</sup>	15.0 4	15.7
July 1, 2010	15.0 4	15.2
July 1, 2011	12.5 4	38.4
July 1, 2012	12.5 4	9.5 <sup>5</sup>
July 1, 2013	6.5 4	13.3 5

<sup>&</sup>lt;sup>1</sup> Adjustment effective April 1, 2005

- <sup>2</sup> Adjustment effective July 14, 2007
- <sup>3</sup> July 1, 2009 was the first year of the new twenty-five year agreement
- <sup>4</sup> Adjustment effective July 1, 2009 through the fiscal year beginning July 1, 2013
- <sup>5</sup> Wholesale rates are adopted annually, pursuant to the 25-year WSA. July 1, 2012 and July 1, 2013 rates are estimates.

Pursuant to the City and County of San Francisco Charter Section 8B.125, an independent rate study is performed at least once every five years. A rate study was undertaken in fiscal year 2009 to examine the future revenue requirements and cost of service of the Enterprise. This resulted in an approved 5-year rate schedule through fiscal year 2013-14.

# Forward Looking Information

On July 18, 2011, Moody's Investors Service, Inc. lowered its municipal bond rating on all outstanding Water Revenue Bonds from "Aa2" to "Aa3" with a stable outlook while S&P maintained its rating on all outstanding Water Revenue Bonds at "AA-" with a stable outlook. The ratings assigned by Moody's express only the views of such rating agency, and is based upon its own investigations, studies, and assumptions. Any such downward revision or withdrawal of the rating may have an adverse effect on the market price of the Bonds. The SFPUC undertakes no responsibility to maintain its current ratings on the Bonds or to oppose any such downward revision, suspension or withdrawal.

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In July 2011, \$720,750 in Water Revenue Bonds were issued as 2011 Series ABCD for the ongoing multi-billion dollar, multi-year WSIP programs and for the refunding of a portion of the 2001 Series A and the 2002 Series A Water Revenue Bonds. This refunding resulted in \$3,311, or 5.8%, in net present value savings. An additional \$24,000 in taxable commercial paper was issued for the WSIP programs. Another \$61,000 in taxable commercial paper was issued to refund outstanding commercial paper maturing on August 1, 2011 and August 3, 2011.

On September 27, 2011, the Board of Supervisors authorized the settlement of claims arising out of nine lawsuits involving Mitchell Engineering, and the issuance of settlement bonds of \$14,080.

### **Request for Information**

This report is designed to provide our citizens, customers, investors, and creditors with an overview of the Enterprise's finances and to demonstrate the Enterprise's accountability for the money it receives. Questions regarding any of the information provided in this report or requests for additional financial information should be addressed to San Francisco Public Utilities Commission, Chief Financial Officer, 1155 Market Street, 11th Floor, San Francisco, CA 94103.

# Statements of Net Assets June 30, 2011 and 2010

(In thousands)

	_	2011	2010
Assets:	-		
Current assets:	<i>•</i>	00.440	110.150
Cash and investments with City Treasury	\$	83,410	113,472
Cash and investments outside City Treasury		253	89
Receivables:			
Charges for services (net of allowance for doubtful accounts of \$2,765 in 2011 and \$2,021 in 2010)		38,310	41,789
Wholesale balancing account		26,029	19,231
Due from other funds		6,122	10,346
Due from other governments		626	998
Interest			52
Advances and other		4,694	587
Total current receivables		75,781	73,003
Inventories		7,949	1,791
Restricted assets - cash and investments outside City Treasury		72,797	43,866
Total current assets		240,190	232,221
Non-current assets:			
Wholesale balancing account receivable		14,997	14,861
Restricted assets - cash and investments with City Treasury		1,093,431	620,347
Restricted assets – cash and investments outside City Treasury		285,366	251,415
Restricted assets – interest and other receivable Capital assets not being depreciated		4,671 1,248,065	751 805.753
Capital assets not of accumulated depreciation		1,231,823	1,058,600
Bond issuance costs (net of accumulated amortization		1,251,025	1,020,000
of \$5,400 in 2011 and \$4,408 in 2010)		22,581	17,371
Total non-current assets	•	3,900,934	2,769,098
Total assets	•	4.141.124	3,001,319
Liabilities:	•	1,111,121	5,001,517
Current liabilities:			
Accounts payable		12,641	10,161
Accrued payroll		7,678	7,560
Accrued vacation and sick leave, current portion		5,764	6,366
Accrued workers' compensation, current portion		1,324	1,468
Due to other funds		13,638	24
Damage claims liability, current portion Deposits, advances, and other liabilities		8,603 8,525	8,719 5,066
Bond and loan interest payable		28,747	16,071
Pollution remediation obligation, current portion			499
Revenue bonds, current portion		44,050	27,795
Commercial paper		150,000	
Current liabilities payable from restricted assets		105,398	74,607
Total current liabilities		386,368	158,336
Long-term liabilities:			
Arbitrage rebate		517	4,553
Other post-employment benefits obligations		60,314	45,598
Accrued vacation and sick leave, less current portion Accrued workers' compensation, less current portion		5,811 6,351	5,461 6,626
Damage claims liability, less current portion		18,387	21,021
Revenue bonds, less current portion		3,140,848	2,217,506
Capital appreciation bonds		4,155	3,878
Certificates of participation		122,115	122,496
Pollution remediation obligation, less current portion			160
Total long-term liabilities		3,358,498	2,427,299
Total liabilities		3,744,866	2,585,635
Net assets:		<u> </u>	· · · · ·
Invested in capital assets, net of related debt		333,386	319,581
Restricted for debt service		30,840	12,073
Restricted for capital projects		19,163	4,346
Unrestricted		12,869	79,684
Total net assets	\$	396,258	415,684
	-	_	

See accompanying notes to financial statements.

# Statements of Revenues, Expenses, and Changes in Net Assets

# Years ended June 30, 2011 and 2010

(In thousands)

-	2011	2010
Operating revenues: Charges for services \$ Rents and concessions Capacity fees Other revenues	271,387 9,388 869 6,751	248,369 8,584 610 7,655
Total operating revenues	288,395	265,218
Operating expenses: Personal services Contractual services Materials and supplies Depreciation Services provided by other departments General and administrative Other	111,363 15,586 13,839 58,752 46,308 6,311 9,768	108,178 13,087 12,748 52,571 47,574 25,917 17,895
Total operating expenses	261,927	277,970
Operating income (loss)	26,468	(12,752)
Non-operating revenues (expenses): Federal and State grants Interest and investment income Interest expense Net gain (loss) from sale of assets Other non-operating revenues Other non-operating expenses	$1,810 \\ 17,283 \\ (100,875) \\ 39 \\ 29,650 \\ (2,121)$	1,5069,823(47,272)(178)4,523(1,773)
Net non-operating expenses	(54,214)	(33,371)
Income before transfers	(27,746)	(46,123)
Capital contribution Transfers to the City and County of San Francisco	26,154 (17,834)	(493)
Net capital contribution and transfers	8,320	(493)
Changes in net assets	(19,426)	(46,616)
Net assets at beginning of year	415,684	462,300
Net assets at end of year \$	396,258	415,684

See accompanying notes to financial statements.

Statements of Cash Flows

Years ended June 30, 2011 and 2010

(In thousands)

	_	2011	2010
Cash flows from operating activities: Cash received from customers, including cash deposits Cash received from tenants for rent Cash paid to employees for services Cash paid to suppliers for goods and services Cash paid for judgments and claims Other operating revenues	\$	273,675 8,853 (94,332) (64,874) (15,183) 5,883	246,684 8,584 (91,035) (94,430) (4,787)
Net cash provided by operating activities		114,022	65,016
Cash flows from non-capital and related financing activities: Transfers out Operating grants Net cash (used in) provided by non-capital	_	(17,834) 3,280	(493) 845
financing activities		(14,554)	352
Cash flows from capital and related financing activities: Proceeds from sale of capital assets Proceeds from bond issuance, net of discounts and issuance costs		39	23
Proceeds from certificate of participation issuance		1,002,870	1,355,644 122,755
Proceeds from commercial paper borrowings Payments on commercial paper		150,000	(229,600)
Principal paid on long-term debt Interest paid on long-term debt Interest paid on commercial paper Issuance costs paid on long-term debt Interfund loans		(59,365) (145,906) (250) (6,202) 4,224	(41,005) (74,131) (337) (12,759) (10,346)
Acquisition and construction of capital assets Capital contribution Federal interest income subsidy from Build America Bonds	_	(581,973) 7,897 17,658	(352,805)
Net cash provided by capital and related financing activities		388,992	758,623
Cash flows from investing activities: Interest income received Proceeds from sale of investments outside City Treasury Purchases of investments outside City Treasury Other investing activities	_	17,608 527,561 (667,310)	9,936 252,781 (340,412) 1,599
Net cash used in investing activities	_	(122,141)	(76,096)
Increase in cash and cash equivalents		366,319	747,895
Cash and cash equivalents: Beginning of year		900,584	152,689
End of year	\$	1,266,903	900,584
Reconciliation of cash and cash equivalents to the statement of net assets: Cash and investments with City Treasury:	=		
Cash and investments with City Treasury: Unrestricted Cash and investments outside City Treasury: Unrestricted Restricted (with maturity 90 days or less – see table in note 3)	\$	83,410 1,093,431 253 89,809	113,472 620,347 89 166,676
Cash and cash equivalents at end of year on	_		100,070
statements of cash flows	\$	1,266,903	900,584

(Continued)

Statements of Cash Flows

# Years ended June 30, 2011 and 2010

(In thousands)

		2011	2010
Reconciliation of operating income (loss) to net cash provided by operating activities: Operating income (loss)	\$	26,468	(12,752)
operating medine (1055)	Ψ	20,400	(12,752)
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:			
Depreciation		58,752	52,571
Provision for uncollectible accounts		744	834
Write-off of capital assets and other non-cash items		1,123	7,043
Changes in operating assets and liabilities:			
Receivables:			
Charges for services		2,734	(4,325)
Wholesale balancing account		(6,934)	(6,521)
Interest and other		1,571	(277)
Inventories		355	58
Accounts payable		2,480	(4,617)
Due to other City departments		13,614	198
Accrued payroll		118	714
Accrued other post-employment benefit liability		14,716	14,631
Accrued vacation and sick leave		(252)	373
Accrued workers' compensation		(419)	(523)
Pollution remediation obligation		(659)	(2,653)
Damage claims liability		(2,750)	20,099
Deposits, advances, and other liabilities		2,361	163
Total adjustments		87,554	77,768
Net cash provided by operating activities	\$	114,022	65,016
Noncash transactions:			
Accrued capital asset costs	\$	105,398	74,607
Capital contribution	·	18,257	

See accompanying notes to financial statements.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

### (1) **Definition of Reporting Entity**

The San Francisco Water Enterprise (the Enterprise) was established in 1930 under the provisions of the Charter of the City and County of San Francisco. The Enterprise acquired the fully developed, mature water works for San Francisco on March 3, 1930. Since then, the City and County of San Francisco (the City) has operated and maintained the water works as the San Francisco Water Enterprise. The Board of Supervisors of the City has adopted resolutions (the Water Resolutions) providing for the issuance of various water revenue and refunding bond series. The Enterprise, which consists of a system of reservoirs, storage tanks, water treatment plants, pump stations, and pipelines, is engaged in the distribution of water to San Francisco and certain suburban areas. In fiscal year 2011, the Enterprise delivered approximately 78,016 million gallons of water to nearly 2.5 million people within San Francisco and certain suburban areas.

The San Francisco Public Utilities Commission (the Commission), established in 1932, is responsible for providing operational oversight of the public utility enterprises of the City, which include the Enterprise along with the City's power and sewer utilities (i.e. Hetch Hetchy Water and Power, of which the Power Enterprise is a component, and the San Francisco Wastewater Enterprise). The Commission is responsible for determining such matters as the rates and charges for services, approval of contracts, and organizational policy.

Until August 1, 2008, the Commission consisted of five members, all appointed by the Mayor. Proposition E, a City and County of San Francisco Charter amendment approved by the voters in the June 3, 2008 election, terminated the terms of all five existing members of the Commission, changed the process for appointing new members, and set qualifications for all members. Under the amended Charter, the Mayor continues to nominate candidates to the Commission, but nominees do not take office until the Board of Supervisors votes to approve their appointments by a majority (at least six members). The amended Charter provides for staggered four-year terms for the Commission members and requires them to meet the following qualifications:

- Seat 1 must have experience in environmental policy and an understanding of environmental justice issues.
- Seat 2 must have experience in ratepayer or consumer advocacy.
- Seat 3 must have experience in project finance.
- Seat 4 must have expertise in water systems, power systems, or public utility management.
- Seat 5 is an at-large member.

The Commission is a department of the City, and as such, the financial operations of the Enterprise, Hetch Hetchy Water and Power, and the Wastewater Enterprises are included in the Comprehensive Annual Financial Report of the City as enterprise funds. These financial statements present only the financial operations of the Enterprise alone and are not intended to present the financial position of the City as a

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

whole or the consolidated entity, the changes in its financial position, and the cash flows of its proprietary funds in conformity with U.S. generally accepted accounting principles.

### (2) Significant Accounting Policies

### (a) Basis of Accounting and Measurement Focus

The accounts of the Enterprise are organized on the basis of a proprietary fund type and are included as an enterprise fund of the City and County of San Francisco, California. The activities of this Enterprise are accounted for with a separate set of self-balancing accounts that comprise the Enterprise's assets, liabilities, net assets, revenues, and expenses. Enterprise funds account for activities (i) that are financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity; or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The financial activities of the Enterprise are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with its operations are included on the statements of net assets; revenues are recognized when earned, and expenses are recognized when liabilities are incurred. Operating revenues are defined as charges to customers, rental income and capacity fees.

The Enterprise does not apply Financial Accounting Standards Board (FASB) statements and interpretations issued after November 30, 1989. The Enterprise applies all applicable Governmental Accounting Standards Board (GASB) pronouncements, as well as statements and interpretations of the FASB, Accounting Principles Board Opinions, and Accounting Research Bulletins of the Committee on Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

### (b) Cash and Cash Equivalents

The Enterprise considers its pooled cash and investments held with the City Treasury to be demand deposits and, therefore, cash and cash equivalents for financial reporting. The City also holds non-pooled cash and investments for the Enterprise. Non-pooled restricted deposits and investments held outside the City Treasury with maturities of three months or less are also considered to be cash equivalents.

### (c) Investments

Money market funds are carried at cost, which approximates fair value. All other investments are stated at fair value based on quoted market prices. Changes in fair value are recognized as investment gains or losses.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

### (d) Inventory

Inventory consists primarily of construction materials and maintenance supplies and is valued at average cost. Inventory is expensed as it is consumed.

### (e) Capital Assets

Capital assets are stated at cost. Depreciation and amortization are computed using the straight-line method based on the estimated useful lives of the related assets, which range from 3 to 75 years for equipment and 3 to 175 years for buildings, structures, and improvements. All donated capital assets are valued at estimated fair value at the time of donation. No depreciation or amortization is recorded in the year of acquisition, and a full year's depreciation is recorded in the year of disposal.

# (f) Intangible Assets

As of July 1, 2009, the Enterprise has adopted GASB Statement 51, *Accounting and Financial Reporting for Intangible Assets*. GASB Statement 51 provides governmental entities with guidance on how to properly identify, account for and report intangible assets, requiring capitalization of the asset and amortization over its useful life.

Under GASB Statement 51, intangible assets are defined as identifiable, non-financial assets capable of being separated, sold, transferred, or licensed, and include contractual or legal rights. Examples of intangible assets include rights-of-way easements, land use rights, water rights, licenses, and permits. The accounting pronouncement also provides guidance on the capitalization of internally generated intangible assets, such as the development and installation of computer software by or on behalf of the reporting entity.

According to the standard, the Enterprise is required to capitalize intangible assets with a useful life extending beyond one reporting period. Effective July 1, 2009, the Enterprise has established a capitalization threshold of \$100. GASB Statement 51 also requires amortization of intangible asset over the benefit period, except for certain assets having an indefinite useful life. Assets with an indefinite useful life generally provide a benefit that is not constrained by legal or contractual limitations or any other external factor, and therefore, are not amortized.

With the adoption of GASB Statement 51, the Enterprise reclassified \$4,652 in intangible assets as of June 30, 2010, primarily composed of \$3,973 in Customer Care & Billing computer software and \$679 in easements.

# (g) Construction in Progress

The cost of acquisition and construction of major plant and equipment is recorded as construction in progress. Costs of discontinued construction projects are recorded as an expense in the year in which the decision is made to discontinue such projects.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

### (h) Capitalization of Interest

A portion of the interest cost incurred on capital projects is capitalized for assets that require a period of time to construct or to otherwise prepare them for their intended use. Such amounts are amortized over the useful lives of the assets.

### (i) Bond Discount, Premium, and Issuance Costs

Bond discount, premium, and issuance costs are amortized over the term of the related bonds on a method which approximates the effective interest method basis.

# (j) Accrued Vacation and Sick Leave

Accrued vacation pay, which may be accumulated up to ten weeks per employee, is charged to expense as earned. Sick leave earned subsequent to December 6, 1978 is non-vesting and may be accumulated up to six months per employee.

### (k) Workers' Compensation

The Enterprise is self-insured for workers' compensation claims and accrues the estimated cost of those claims, including the estimated cost of incurred but not reported claims.

# (1) Damage Claims Liability

The Enterprise is self-insured for general liability and uninsurable property damage claims. Commercially uninsurable property includes assets that are underground or provide transmission and distribution. Maintained commercial coverage does not cover claims attributed to loss from earthquake, contamination, pollution remediation efforts and other specific naturally occurring contaminants such as mold. The liability represents an estimate of the cost of all outstanding claims, including adverse loss development, and estimated incurred but not reported claims.

# (m) Arbitrage Rebate Payable

Certain bonds are subject to arbitrage rebate requirements in accordance with regulations issued by the U.S. Treasury Department. The requirements generally stipulate that earnings from the investment of the tax-exempt bond proceeds that exceed related interest costs on the bonds must be remitted to the federal government on every fifth anniversary of each bond issue. During fiscal year 2011, the enterprise paid \$4,256 to the Internal Revenue Service, representing 90% of the outstanding arbitrage liability to be paid by April 1, 2011. The liability for arbitrage rebate was \$517 and \$4,553 at June 30, 2011 and 2010, respectively.

# (n) Refunding of Debt

Gains or losses occurring from advance refunding of debt are deferred and amortized into interest expense over the remaining life of the old bonds or the life of the new bonds, whichever is shorter.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

### (o) Income Taxes

As a government agency, the Enterprise is exempt from both Federal income taxes and California State franchise taxes.

### (p) Revenue Recognition

Water service charges are based on water usage as determined by the Enterprise. Generally, customers are billed on a cyclical basis with large commercial and industrial customers billed monthly, and all other customers bi-monthly. Revenues earned but unbilled are accrued as charges for services receivables on the statements of net assets.

### (q) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the 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.

### (r) Reclassifications

Certain reclassifications have been made to prior year amounts to conform to current year presentation.

# (s) Accounting and Financial Reporting for Pollution Remediation Obligations

The Enterprise adopted GASB Statement 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, in fiscal year 2009. To provide governments with better accounting guidance and consistency, GASB Statement 49, identifies the circumstances under which a governmental entity would be required to report a liability related to pollution remediation.

According to the standard, a government would have to estimate its expected outlays for pollution remediation if it knows a site is polluted and any of the following recognition triggers occur:

- Pollution poses an imminent danger to the public or environment and a government has little or no discretion to avoid fixing the problem;
- A government has violated a pollution prevention-related permit or license;
- A regulator has identified (or evidence indicates it will identify) a government as responsible (or potentially responsible) for cleaning up pollution, or for paying all or some of the cost of the clean up;
- A government is named (or evidence indicates that it will be named) in a lawsuit to compel it to address the pollution; or

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

• A government begins or legally obligates itself to begin cleanup or post-cleanup activities (limited to amounts the government is legally required to complete).

As a part of ongoing operations, situations may occur requiring the removal of pollution or other hazardous material. These situations typically arise in the process of acquiring an asset, preparing an asset for its intended use, or during the design phase of projects under review by the Project Managers. Other times, pollution may arise during the implementation and construction of a major or minor capital project. Examples of pollution may include, but are not limited to: asbestos or lead paint removal; leaking of sewage in underground pipes or neighboring areas; chemical spills; removal and disposal of known toxic waste; harmful biological and chemical pollution of water; or contamination of surrounding soils by underground storage tanks (UST).

The Enterprise did not have any pollution remediation liability as of June 30, 2011 and recorded \$659 in pollution remediation liability as of June 30, 2010.

### (3) Cash, Cash Equivalents and Investments

The Enterprise's cash, cash equivalents and investments with the City Treasury are invested in an unrated City pool pursuant to investment policy guidelines established by the City Treasurer. The objectives of the policy guidelines are, in order of priority, preservation of capital, liquidity, and yield. The policy addresses soundness of financial institutions in which the City will deposit funds, types of investment instruments as permitted by the California Government Code, and the percentage of the portfolio which may be invested in certain instruments with longer terms to maturity. The City Treasurer allocates income from the investment of pooled cash at month end in proportion to the Enterprise's average daily cash balances. The primary objectives of the Enterprise's investment policy are consistent with the City's policy.

Restricted assets are held by an independent trustee outside the City's investment pool. The assets are held for the purpose of paying future interest and principal on the bonds and for eligible capital project expenditures. The balances as of June 30, 2011 and 2010 were \$358,163 and \$295,281, respectively. The Enterprise held all investments in guaranteed investment contracts, Treasury and Government Obligations, Commercial Paper, Corporate Bonds and Notes, as well as money market mutual funds consisting of Treasury and Government Obligations.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

The following tables present the restricted cash and investments outside City Treasury as of June 30, 2011 and 2010.

	<b>Credit Ratings</b>	June 30,	2011	
Investments	(S&P/Moody's)	Maturities	Fair Value	
U.S. Treasury Notes	Not applicable	August 31, 2016	\$	28,635
U.S. Agencies	AAA/Aaa	April 18, 2016		62,424
U.S. Agencies	AAA/Aaa	August 20, 2015		7,066
U.S. Agencies	AAA/Aaa	April 2, 2014		3,472
U.S. Agencies	AAA/Aaa	October 28, 2013		12,537
U.S. Treasury Notes - State and Local Government Series	Not applicable	May 1, 2013		8,584
U.S. Agencies	AAA/Aaa	April 15, 2013		12,416
Guaranteed Investment Contracts	A+/Aa3	March 16, 2013		15,958
U.S. Treasury Notes - State and Local Government Series	Not applicable	November 1, 2012		10,402
U.S. Agencies	AAA/Aaa	October 30, 2012		12,459
U.S. Treasury Notes - State and Local Government Series	Not applicable	May 1, 2012		11,677
Corporate Bonds & Notes	AAA/Aaa	April 30, 2012		12,090
U.S. Treasury Notes	AAA/Aaa	December 15, 2011		18,467
U.S. Agencies	AAA/Aaa	December 14, 2011		14,271
U.S. Treasury Notes - State and Local Government Series	Not applicable	November 1, 2011		25,451
Commercial Paper	Not applicable	November 1, 2011		12,445
U.S. Treasury Money Market Funds	AAA/Aaa	< 90 days		60,585
U.S. Agencies	AAA/Aaa	< 90 days		22,632
Corporate Bonds & Notes	AAA/Aaa	< 90 days		6,592
Total			\$	358,163

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

<b>Restricted Cash and Investments outside City Treasury</b>				
<b>Credit Ratings</b>	June 30, 2	010		
(S&P/Moody's)	Maturities	Fair Value		
Not applicable	August 31, 2016	\$ 27,038		
AA-/Aa2	March 16, 2013	15,958		
Not applicable	May 1, 2013	3,489		
Not applicable	November 1, 2012	4,448		
Not applicable	May 1, 2012	5,036		
Not applicable	November 1, 2011	18,225		
Not applicable	May 1, 2011	27,648		
Not applicable	November 1, 2010	26,763		
Not applicable	< 90 days	45,490		
Not applicable	< 90 days	121,186		
		\$ 295,281		
	Credit Ratings (S&P/Moody's) Not applicable AA-/Aa2 Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable	Credit RatingsJune 30, 2(S&P/Moody's)MaturitiesNot applicableAugust 31, 2016AA-/Aa2March 16, 2013Not applicableMay 1, 2013Not applicableMay 1, 2012Not applicableMay 1, 2012Not applicableMay 1, 2012Not applicableMay 1, 2011Not applicableMay 1, 2011Not applicableNovember 1, 2011Not applicableMay 1, 2011Not applicableMay 1, 2011Not applicableMay 1, 2010Not applicableSovember 1, 2010Not applicableNovember 1, 2010Not applicableSovember 1, 2010Not applicableSovember 1, 2010		

The restricted cash and investments outside City Treasury as of June 30, 2011 included a \$2,507 unrealized gain due to increases in fair values on U.S. Treasury Notes and U.S. Agencies from June 30, 2010.

Funds held by the trustee established under the 2002 Amended and Restated Indentures agreements are invested in "Permitted Investments," as defined in the agreement, which includes money market funds and investment agreements. The agreement permits investment in money market funds registered under the Federal Investment Company Act of 1940 and whose shares are also registered under the Federal Securities Act of 1933 and having a rating by Standard & Poor's of "AAAm-G," "AAAm" or "AAM" and a rating by Moody's of "Aaa," "Aa1" or "Aa2." The credit ratings of the money market funds invested in as of June 30, 2011 and June 30, 2010 were "Aaa" by Moody's and "AAA" by Standard & Poor's. Investment agreements must be with a U.S. bank or trust company having a rating by Moody's and S&P of "A" or higher, or are guaranteed by any entity with a rating of "A" or higher, at the time the agreement is entered into.

Additional cash outside of the investment pool included revolving fund and cash in transit. The revolving fund has a balance of \$33 at June 30, 2011 and 2010, which is held in a commercial bank in non-interest bearing checking accounts covered by Federal Deposit Insurance Corporation depository insurance. These accounts were established as provided by the City's Administrative Code for revolving fund needs. The cash in transit was \$220 at June 30, 2011 and \$56 at June 30, 2010.

Notes to Financial Statements

### June 30, 2011 and 2010

### (Dollars in thousands, unless otherwise stated)

The Enterprise's cash, cash equivalents and investments are shown on the accompanying statements of net assets as follows:

		2011	2010
Current assets:			
Cash and investments with City Treasury	\$	83,410	113,472
Cash and investments outside City Treasury		253	89
Restricted cash and investments outside City Treasury		72,797	43,866
Non-current assets:			
Restricted cash and investments with City Treasury		1,093,431	620,347
Restricted cash and investments outside City Treasury		285,366	251,415
Total cash, cash equivalents and investments	\$_	1,535,257	1,029,189

The following table shows the percentage distribution of the City's pooled investments by maturity as of June 30, 2011:

Investment maturities (in months)					
Under 1	1 to less than 6	6 to less than 12	12 to 60		
1.3%	13.2%	13.4%	72.1%		

The following table shows the percentage distribution of the City's pooled investments by maturity as of June 30, 2010:

Investment maturities (in months)					
Under 1	1 to less than 6	6 to less than 12	12 to 60		
0.0%	2.9%	16.6%	80.5%		

Notes to Financial Statements

### June 30, 2011 and 2010

### (Dollars in thousands, unless otherwise stated)

# (4) Capital Assets

Capital assets as of June 30, 2011 and 2010 consist of the following:

	Balance June 30, 2010	Increases	Decreases	Balance June 30, 2011
Capital assets not being depreciated: Land Intangible assets Construction in progress	\$ 17,707 679 787,367	1,105 	(217,880) *	18,812 679 1,228,574
Total capital assets not being depreciated	805,753	660,192	(217,880)	1,248,065
Capital assets being depreciated: Facilities and improvements Intangible assets Machinery and equipment	1,548,575 3,973 195,639	196,524 5,512 29,939	(5,658)	1,745,099 9,485 219,920
Total capital assets being depreciated	1,748,187	231,975	(5,658)	1,974,504
Less accumulated depreciation for: Facilities and improvements Intangible assets Machinery and equipment	(584,860)  (104,727)	(46,552) (973) (11,227)	5,658	(631,412) (973) (110,296)
Total accumulated depreciation	(689,587)	(58,752)	5,658	(742,681)
Total capital assets being depreciated, net	1,058,600	173,223		1,231,823
Total capital assets, net	\$ 1,864,353	833,415	(217,880)	2,479,888

\* Includes \$1,123 in capital project write-offs mainly relating to Thomas Shaft Disinfection Station and Access Road Improvements, and San Joaquin Pipeline Demolition.

Notes to Financial Statements

# June 30, 2011 and 2010

### (Dollars in thousands, unless otherwise stated)

		Balance June 30, 2009	Increases	Decreases	Balance June 30, 2010
Capital assets not being depreciated: Land and rights-of-way Intangible assets Construction in progress	\$	18,386  547,293	679 417,265	(679)  	17,707 679 * 787,367
Total capital assets not being depreciated		565,679	417,944	(177,870)	805,753
Capital assets being depreciated: Facilities and improvements Intangible assets Machinery and equipment	-	1,426,180  146,788	123,062 3,973 49,456	(667)  (605)	1,548,575 3,973 195,639
Total capital assets being depreciated	-	1,572,968	176,491	(1,272)	1,748,187
Less accumulated depreciation for: Facilities and improvements Machinery and equipment Intangible assets	-	(537,920) (99,467) —	(46,940) (5,631)	371	(584,860) (104,727)
Total accumulated depreciation		(637,387)	(52,571)	371	(689,587)
Total capital assets being depreciated, net	-	935,581	123,920	(901)	1,058,600
Total capital assets, net	\$	1,501,260	541,864	(178,771)	1,864,353

\* Includes \$7,037 in capital project write-offs mainly relating to Harry Tracy Water Treatment Plant Demolition, Watershed and Facilities Fence Projects, and Balboa/Francisco Reservoirs Study.

Capital assets with a useful life of 50 years or greater include buildings and structures, reservoirs, dams, treatment plants, pump stations, certain water mains and pipelines, sewer systems, tunnels, and bridges.

Notes to Financial Statements

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Financial Accounting Standards Board (FASB) Statement 34, *Capitalization of Interest Costs*, requires that interest expense incurred during construction of assets be capitalized. Interest included in the construction in progress and total interest expense incurred during the years ended June 30, 2011 and 2010 are as follows:

	2011		2010
Interest expensed Interest included in construction in progress	\$	100,875 50,901	47,272 36,131
Total interest incurred	\$	151,776	83,403

During fiscal years ending in 2011 and 2010, the Enterprise expensed \$1,123 and \$7,037, respectively, related to capitalized design and planning costs on certain projects. The amounts of the write-offs were recognized as other operating expenses in the accompanying statements of revenues, expenses, and changes in net assets.

### (5) Restricted Assets

Pursuant to the Indentures, all revenues of the Enterprise (except amounts on deposit in the rebate fund) are irrevocably pledged to the punctual payment of debt service on the Water Revenue and Refunding Bonds. Accordingly, the revenues of the Enterprise shall not be used for any other purpose while any of its Water Revenue and Refunding Bonds are outstanding, except as expressly permitted by the Indentures. Further, all revenues shall be deposited by the City Treasurer, by instruction of the Enterprise, in special funds designated as the Water Enterprise Revenue Fund (the Water Revenue Fund), which must be maintained in the City Treasury. These funds, held at the City Treasury, are recorded in the statements of net assets of the Enterprise as cash and investments with the City Treasury. Deposits in the Water Revenue Fund, including earnings thereon, shall be appropriated, transferred, expended, or used for the following purposes pertaining to the financing, maintenance, and operation of the Enterprise in accordance with the following priority:

- 1. The payment of operation and maintenance expenses for such utility and related facilities;
- 2. The payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Enterprise may establish or the Board of Supervisors may require with respect to employees of the Enterprise;
- 3. The payment of principal, interest, reserve, sinking fund, and other mandatory funds created to secure Revenue Bonds issued by the Enterprise for the acquisition, construction, or extension of facilities owned, operated, or controlled by the Enterprise;
- 4. The payment of principal and interest on General Obligation Bonds issued by the City for the Enterprise's purposes;

Notes to Financial Statements

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(Dollars in thousands, unless otherwise stated)

- 5. Reconstruction and replacement as determined by the Enterprise or as required by any of the Enterprise's Revenue Bond ordinances duly adopted and approved; and
- 6. The acquisition of land, real property, or interest in real property for, and the acquisition, construction, enlargement, and improvement of, new and existing buildings, structures, facilities, equipment, appliances, and other property necessary or convenient to the development or improvement of such utility owned, controlled, or operated by the Enterprise; and for any other lawful purpose of the Enterprise, including the transfer of surplus funds pursuant to Section 6.407(e) of the City's Charter.

In accordance with the Indenture, the Program maintains certain restricted cash and investment balances in trust. Restricted assets held in trust consisted of the following as of June 30, 2011 and 2010:

	2011	2010
Cash and investments with City Treasury:		
Water revenue bond construction fund \$	1,093,431	620,347
Cash and investments outside City Treasury:		
1991 Capital Appreciation Bond	15	15
2001A Water revenue bond fund	2,606	2,545
2002A Water revenue bond fund	3,285	3,451
2002B Water revenue bond fund	4,965	4,790
2006A Water revenue bond fund	26,392	25,761
2006B Water revenue bond fund	3,028	2,945
2006C Water revenue bond fund	2,013	1,952
2009A Water revenue bond fund	25,818	38,675
2009B Water revenue bond fund	27,482	41,190
2010ABC Water revenue bond fund	45,383	52,771
2010D Water revenue bond fund	10,061	—
2010E Water revenue bond fund	38,690	_
2010F Water revenue bond fund	32,281	
2010G Water revenue bond fund	62,887	_
2009C Certificates of participation – 525 Golden Gate	18,241	29,291
2009D Certificates of participation – 525 Golden Gate	55,016	91,895
Total cash and investments outside City Treasury	358,163	295,281
Interest receivable:		
Water bond construction fund		273
Total restricted assets \$	1,451,594	915,901

Restricted assets listed above as cash and investments with City Treasury are held in sub-funds of the Water Revenue Fund.

Notes to Financial Statements June 30, 2011 and 2010 (Dollars in thousands, unless otherwise stated)

### (6) Short-Term Debt

The Commission and the Board of Supervisors have authorized the issuance of up to \$250,000 in commercial paper pursuant to the voter-approved 2002 Proposition E. As of June 30, 2011, \$150,000 in short-term commercial paper was outstanding. The short-term commercial paper interest rates ranged from 0.2% to 0.4%.

With maturities up to 270 days, the Enterprise intends to maintain the program by remarketing the commercial paper upon maturity over the next five years, at which time outstanding commercial paper will be refunded with long-term revenue bonds. This is being done to take advantage of the continued low interest rate environment. If the commercial paper interest rates rise to a level that exceeds these benefits, the Enterprise will refinance the commercial paper with the long-term fixed rate debts.

Notes to Financial Statements

# June 30, 2011 and 2010

# (Dollars in thousands, unless otherwise stated)

# (7) Changes in Long-Term Liabilities

Long-term liability activities for the years ended June 30, 2011 and 2010 are as follows:

	Coupon interest rate*	Final maturity date	7	July 1, 2010	Additions	Reductions	June 30, 2011	Due within one year
Revenue Bonds:								
2001A revenue bonds	4.0-5.0%	2031	\$	60,235	-	(3,065)	57,170	3,195
2002A revenue bonds	2.5 - 5.0	2032		144,260	-	(34,995)	109,265	3,605
2002B revenue refunding bonds	3.0 - 5.0	2015		45,050	-	(6,640)	38,410	6,985
2006A revenue bonds	4.0 - 5.0	2036		488,555	-	(8,895)	479,660	9,350
2006B revenue refunding bonds	4.0 - 5.0	2026		101,100	-	(3,300)	97,800	3,465
2006C revenue refunding bonds	4.0 - 5.0	2026		41,185	-	(2,470)	38,715	2,590
2009A revenue bonds	4.0 - 5.3	2039		412,000	-	-	412,000	6,460
2009B revenue bonds	4.0 - 5.0	2039		412,000	-	-	412,000	6,610
2010A revenue bonds	2.0 - 5.0	2030		56,945	-	-	56,945	1,790
2010B revenue bonds	4.0 - 6.0	2040		417,720	-	-	417,720	-
2010C revenue refunding bonds	5.0	2015		14,040	-	-	14,040	-
2010D revenue and refunding bonds	3.0 - 5.0	2021		-	102,725	-	102,725	-
2010E revenue bonds	4.9 - 6.0	2040		-	344,200	-	344,200	-
2010F revenue bonds	3.0 - 5.5	2030		-	180,960	-	180,960	-
2010G revenue bonds	6.9	2050		-	351,470	-	351,470	-
Less deferred amounts:								
For issuance premiums				64,115	26,920	(5,625)	85,410	-
For refunding loss			_	(11,904)	(3,405)	1,717	(13,592)	-
Total revenue bonds payable				2,245,301	1,002,870	(63,273)	3,184,898	44,050
1991 capital appreciation bonds	0.00	2019		3,878	277	-	4,155	-
2009C certificates of participtation (COPs)	2.0 - 5.0	2022		27,218	-	-	27,218	-
Issuance premiums - COPs (2009C)				2,779	-	(381)	2,398	-
2009D certificates of participtation (COPs)	6.36 - 6.49	2041		92,499	-	-	92,499	-
Other post-employment benefits obligation				45,598	19,930	(5,214)	60,314	-
Arbitrage rebate payable				4,553	221	(4,257)	517	-
Accrued vacation and sick leave				11,827	7,269	(7,521)	11,575	5,764
Accrued workers' compensation				8,094	2,030	(2,449)	7,675	1,324
Damage claims liability				29,740	6,815	(9,565)	26,990	8,603
Pollution remediation obligation				659		(659)	-	-
Total			\$	2,472,146	1,039,412	(93,319)	3,418,239	59,741

\* After adjusting for the Federal interest subsidy, the true interest costs for revenue bonds 2010 Sub-Series B, Sub-Series E and Sub-Series G, all issued as Build America Bonds, are 3.9%, 3.8%, and 4.5%, respectively. After adjusting for the Federal interest subsidy, the true interest cost for the certificates of participation 2009 Series D, also issued as Build America Bonds, is 4.3%.

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### June 30, 2011 and 2010

#### (Dollars in thousands, unless otherwise stated)

	Coupon interest rate*	Final maturity date	7	July 1, 2009	Additions	Reductions	June 30, 2010	Due within one year
Revenue Bonds:								
2001A revenue bonds	4.0-5.0%	2031	\$	77,580	-	(17,345)	60,235	3,065
2002A revenue bonds	2.5 - 5.0	2032		147,520	-	(3,260)	144,260	3,425
2002B revenue refunding bonds	3.0 - 5.0	2015		51,425	-	(6,375)	45,050	6,640
2006A revenue bonds	4.0 - 5.0	2036		497,060	-	(8,505)	488,555	8,895
2006B revenue refunding bonds	4.0 - 5.0	2026		104,245	-	(3,145)	101,100	3,300
2006C revenue refunding bonds	4.0 - 5.0	2026		43,560	-	(2,375)	41,185	2,470
2009A revenue bonds	4.0 - 5.3	2039		-	412,000	-	412,000	-
2009B revenue bonds	4.0 - 5.0	2039		-	412,000	-	412,000	-
2010A revenue bonds	2.0 - 5.0	2030		-	56,945	-	56,945	-
2010B revenue bonds	4.0 - 6.0	2040		-	417,720	-	417,720	-
2010C revenue refunding bonds	5.0	2015		-	14,040	-	14,040	-
Less deferred amounts:								
For issuance premiums				24,929	42,939	(3,753)	64,115	-
For refunding loss				(13,433)	-	1,529	(11,904)	-
Total revenue bonds payable				932,886	1,355,644	(43,229)	2,245,301	27,795
1991 capital appreciation bonds	0.00	2019		3,620	258	-	3,878	-
2009C certificates of participtation (COPs)	2.0 - 5.0	2022		-	27,218	-	27,218	-
Issuance premiums-COPs (2009C)				-	3,038	(259)	2,779	-
2009D certificates of participtation (COPs)	6.36 - 6.49	2042		-	92,499	-	92,499	-
Other post-employment benefits obligation				30,967	19,073	(4,442)	45,598	-
Arbitrage rebate payable				4,265	288	-	4,553	-
Accrued vacation and sick leave				11,454	8,380	(8,007)	11,827	6,366
Accrued workers' compensation				8,617	1,624	(2,147)	8,094	1,468
Damage claims liability				9,641	26,835	(6,736)	29,740	8,719
Pollution remediation obligation				3,312		(2,653)	659	499
Total			\$	1,004,762	1,534,857	(67,473)	2,472,146	44,847

\* After adjusting for the Federal interest subsidy, the true interest costs for revenue bond 2010 Sub-Series B and the certificates of participation 2009 Series D, both issued as Build America Bonds, are 3.9% and 4.3%, respectively.

### (a) Capital Appreciation Bonds

The capital appreciation bonds mature from November 1, 2018 through November 1, 2019. The bonds were insured by MBIA and carried "Aaa" and "AAA" ratings from Moody's and Standard & Poor's (S&P), respectively. In February 2009, the bonds were further reinsured by NPFGC and carried "Baa1" and "A" ratings from Moody's and S&P, respectively. As of June 30, 2011, MBIA was rated "B3" and "B" by Moody's and S&P, respectively, while NPFGC has affirmed ratings of "Baa1" and "BBB" from Moody's and S&P, respectively. Interest on the capital appreciation bonds is due upon maturity and is recognized as annual interest expense over the life of the bonds using the interest method. The Enterprise has recognized \$4,155 and \$3,878 of unpaid principal and interest on the capital appreciation bonds as of June 30, 2011 and 2010, respectively, and has reported it as capital appreciation bonds in the accompanying statements of net assets.

### (b) Water Revenue Bonds Series 2001A

During fiscal year 2002, the Enterprise issued \$140,000 of 2001 Series A revenue bonds. The bonds were insured by Assured Guaranty (formerly FSA) and carried "Aaa" and "AAA" ratings from

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Moody's and S&P, respectively. As of June 30, 2011, Assured Guaranty was rated "Aa3" and "AA+" by Moody's and S&P, respectively. The revenue bonds include current interest serial and term bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2021 and the current interest term bonds mature on November 1, 2024, 2027, and 2031. In March 2006, \$45,630 of the 2001A serial and term bonds with maturities of November 2016 to November 2024 were refunded by the 2006 refunding Series B revenue bonds.

On June 17, 2010, the Enterprise issued \$14,040 of the 2010 Sub-Series C revenue bonds for the purpose of refunding \$14,400 of then-outstanding 2001 Series A revenue bonds. The 2010 bonds bear a coupon rate of 5.0% and mature serially from 2012 to 2015. The refunded Series 2001A bonds carried a coupon rate of 5.0% and also matured between 2012 and 2015. Unamortized Series 2001A bond issuance costs were \$126 at the date of the refunding. Although the refunding resulted in the recognition of a deferred accounting loss of \$1,044, the Enterprise achieved net present value debt service savings of \$919 or 6.4% of the refunded principal.

A portion of the proceeds on the 2010 Sub-Series C revenue bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated June 1, 2010, to refund and legally defease a portion of the outstanding 2001 Series A bonds. This deposit, together with certain other available moneys was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities - State and Local Government Series (SLGS). The principal and interest on monies held by the escrow agent will be sufficient to redeem the refunded 2001 Series A bonds on November 1, 2011 by optional redemption on that date. As of June 30, 2011, the outstanding amount of 2001 Series A bonds was \$57,170.

### (c) Water Revenue Bonds Series 2002A

During fiscal year 2003, the Enterprise issued \$164,000 of revenue bonds 2002 Series A. The bonds were insured by MBIA and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. In February 2009, the bonds were further reinsured by NPFGC and carried "Baa1" and "A" ratings from Moody's and S&P, respectively. As of June 30, 2011, MBIA was rated "B3" and "B" by Moody's and S&P, respectively, while NPFGC carried "Baa1" and "BBB" ratings from Moody's and S&P, respectively. The revenue bonds include interest and serial and term bonds with interest rates varying from 2.5% to 5.0%. The current interest serial bonds mature through November 1, 2026, and the current interest term bonds mature on November 1, 2025 and 2032.

In August 2010, the Enterprise issued \$102,725 of the 2010 Sub-Series D revenue bonds for the purpose of refunding \$31,570 of then-outstanding 2002 Series A revenue bonds, providing \$72,243 in new money for WSIP implementation, funding the debt service reserve and capitalized interest funds and paying the costs of issuing the bonds. The 2010 bonds bear coupon rates of 3.0% to 5.0% and mature serially from 2015 to 2021. The refunded Series 2002A bonds carried a coupon rate of 5.0% and will mature between 2016 and 2021. Unamortized Series 2002A bond issuance costs were \$208 at the date of the refunding.

A portion of the proceeds on the 2010 Sub-Series D revenue bonds was deposited with the trustee, acting as escrow agent under the irrevocable Escrow Agreement, dated August 1, 2010, to refund

Notes to Financial Statements

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and legally defease a portion of the outstanding 2002 Series A bonds. This deposit, together with certain other available moneys, was held by the escrow agent under the Escrow Agreement and invested in non-callable Federal Securities consisting of United States Treasury Securities-State and Local Government Series (SLGS). The principal and interest on monies held by the escrow agent will be sufficient to redeem the refunded 2002 Series A bonds on August 1, 2012 by optional redemption.

As of June 30, 2011, the 2002 Series A bonds outstanding was \$109,265. Although the refunding resulted in the recognition of a deferred accounting loss of \$3,405, the Enterprise achieved net present value debt service savings of \$2,703 or 8.6% of the refunded principal.

### (d) Water Revenue Refunding Bonds Series 2002B

During fiscal year 2003, the Enterprise issued revenue refunding bonds, 2002 Series B in the amount of \$85,260 with interest rates ranging from 3.0% to 5.0%. The bonds were insured by MBIA and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. In February 2009, the bonds were further reinsured by NPFGC and carried "Baa1" and "A" ratings from Moody's and S&P, respectively. As of June 30, 2011, MBIA was rated "B3" and "B" by Moody's and S&P, respectively, while NPFGC has ratings of "Baa1" and "BBB" from Moody's and S&P, respectively. The current interest serial bonds mature through November 1, 2015.

### (e) Water Revenue Bonds Series 2006A

During fiscal year 2006, the Enterprise issued revenue bonds, 2006 Series A in the amount of \$507,815. The purpose of the bonds is to finance improvements to the City's water systems pursuant to Proposition A and to retire commercial paper outstanding. The bonds were insured by Assured (formerly FSA) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. As of June 30, 2011, Assured was rated "Aa3" and "AA+" by Moody's and S&P, respectively. The 2006 Series A bonds include current interest and serial and term bonds with interest rates ranging from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2027 and the current interest term bonds mature on November 1, 2031 and 2033 and 2036.

# (f) Water Revenue Refunding Bonds Series 2006B

During fiscal year 2006, the Enterprise issued revenue refunding bonds, 2006 Series B in the amount of \$110,065. The purpose of the bonds is to refund a portion of the 1996A Series A bonds and the 2001 Series A bonds. The bonds were insured by Syncora (formerly XL) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. As of June 30, 2011, Syncora was rated "Ca" and "NR" by Moody's and S&P, respectively. The 2006B refunding bonds include serial bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2026.

# (g) Water Revenue Refunding Bonds Series 2006C

During fiscal year 2007, the Enterprise issued revenue refunding bonds, 2006 Series C in the amount of \$48,730 for the purpose of refunding the remaining portion of the outstanding 1996 Series A

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bonds maturing on and after November 1, 2007 (the Refunded 1996 Series A Bonds). The bonds were insured by Syncora (formerly XL) and carried "Aaa" and "AAA" ratings from Moody's and S&P, respectively. As of June 30, 2011, Syncora was rated "Ca" and "NR" by Moody's and S&P, respectively. The 2006 Series C refunding bonds include serial bonds with interest rates varying from 4.0% to 5.0%. The current interest serial bonds mature through November 1, 2026.

### (h) Water Revenue Bonds Series 2009A

During fiscal year 2010, the Enterprise issued revenue bonds, 2009 Series A in the amount of \$412,000. The purpose of the bonds is to refund \$229,600 of outstanding Proposition A commercial paper notes and to provide \$139,218 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "A1" from S&P and Moody's, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.3%. The bonds mature through November 1, 2039. The 2009 Series A bonds have a true interest cost of 4.8%.

### (i) Water Revenue Bonds Series 2009B

During fiscal year 2010, the Enterprise issued revenue bonds, 2009 Series B in the amount of \$412,000. The purpose of the bonds is to provide \$377,778 in new money for WSIP capital projects, with the balance applied to financing costs and a cash-funded debt service reserve. The bonds were rated "AA-" and "A1" from S&P and Moody's, respectively. The bonds include serial and term bonds with interest rates varying from 4.0% to 5.0%. The bonds mature through November 1, 2039. The 2009 Series B bonds have a true interest cost of 4.5%.

# (j) Water Revenue Bonds Series 2010 ABC

During fiscal year 2010, the Enterprise issued its revenue bonds, 2010 Series ABC in the combined principal amount of \$488,705. The purpose of the bonds is to refund \$14,400 of outstanding 2001 Series A revenue bonds, to provide \$58,748 in proceeds for the AMI Project and to provide \$364,757 in new money for WSIP capital projects, with the balance applied to financing costs and a cashfunded debt service reserve. The bonds were rated "AA-" and "Aa2" from S&P and Moody's, respectively. The bonds included serial and term bonds with interest rates varying from 2.0% to 6.0%.

The \$56,945 Sub-Series A bonds were issued as tax-exempt bonds to provide funds for the AMI Project as well as financing costs. The Sub-Series A bonds were issued as serial bonds with coupons ranging from 2.0% to 5.0% and have a final maturity of 2030. The sub-series A bonds have a true interest cost of 3.8%.

The \$417,720 Sub-Series B bonds were issued as taxable Build America Bonds (with Direct Pay Subsidy) to provide \$364,757 in new money for WSIP capital projects as well as to pay financing costs. The Sub-Series B bonds were issued as serial and term bonds with coupons ranging from 4.0% to 6.0% and have a final maturity of 2040. The Sub-Series B bonds have a true interest cost (net of federal subsidy) of 3.9%.

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The \$14,040 Sub-Series C bonds were issued to advance refund \$14,400 of outstanding revenue bonds, 2001 Series A and to pay financing costs. The Sub-Series C bonds were issued as serial bonds with 5.0% coupons and a final maturity of 2015, and have a true interest cost of 1.6%.

#### (k) Water Revenue Bonds Series 2010 DE

In July 2010, the Enterprise issued revenue bonds 2010 Series DE in the combined principal amount of \$446,925. The Sub-Series D bonds were issued as tax-exempt bonds, while the Sub-Series E bonds were issued as Build America Bonds with a Direct Pay Subsidy. The \$102,725 Sub-Series D bonds provided \$72,243 in new money for WSIP implementation and also provided \$35,080 to advance refund a portion of the SFPUC's Water Revenue Bonds, Series 2002 A bonds, as well as providing funds for financing costs. The \$344,200 Sub-Series E bonds provided \$300,446 in new money for WSIP projects, with the balance applied to financing costs. The bonds included serial and term bonds with interest rates varying from 3% to 6%, and mature through November 1, 2040. (refer to note (c) Water Revenue Bond Series 2002A in relation to the refunding).

#### (l) Water Revenue Bonds Series 2010FG

In December 2010, the Enterprise issued revenue bonds 2010 Series FG in the combined principal amount of \$532,430. The Sub-Series F bonds were issued as tax-exempt bonds, while the Sub-Series G bonds were issued as Build America Bonds with a Direct Pay Subsidy. The \$180,960 Sub-Series F bonds provided \$149,728 in new money for WSIP. The \$351,470 Sub-Series G bonds provided \$288,252 in new money for WSIP projects, with the balance applied to financing costs. The bonds included serial and term bonds with interest rates varying from 3% to 6.9%, and mature through November 1, 2050.

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#### (m) Future Annual Debt Service of Revenue Bonds

The following table presents the future annual debt service relating to the revenue and refunding bonds outstanding as of June 30, 2011. The interest before subsidy amounts include the interest for the revenue bonds 2001 Series A, 2002 Series A, 2002 refunding Series B, 2006 Series A, 2006 refunding Series B and C, 2009 Series A and B, 2010 Series ABC, 2010 Series DE, and 2010 Series FG. The Federal interest subsidy amounts represent 35% of the interest for the revenue bond 2010 Sub-Series B, Sub-Series E and Sub-Series G.

		D. t t I	Interest before	Federal interest	Interest net
	_	Principal	subsidy	subsidy	ofsubsidy
Years ending June 30:					
2012	\$	44,050	164,100	(23,921)	140,179
2013		45,965	162,039	(23,921)	138,118
2014		48,130	159,887	(23,921)	135,966
2015		50,485	157,583	(23,921)	133,662
2016		62,940	154,839	(23,921)	130,918
2017 - 2021		383,200	723,772	(117,560)	606,212
2022 - 2026		493,195	618,737	(110,283)	508,454
2027 - 2031		619,255	478,532	(96,145)	382,387
2032 - 2036		613,615	312,093	(74,231)	237,862
2037 - 2041		537,475	145,771	(43,597)	102,174
2042 - 2046		95,305	58,671	(20,535)	38,136
2047 - 2051	_	119,465	21,507	(7,527)	13,980
		3,113,080	3,157,531	(589,483)	2,568,048
Less current portion		(44,050)			
Add unamortized bond premium, net of discount and refunding loss		71,818			
Long-term portion as of June 30, 2011	\$ _	3,140,848			

As defined in the Indentures, the principal and interest of the Enterprise's revenue and refunding bonds are payable from its revenues, as well as monies deposited in certain funds and accounts pledged thereto (note 5).

#### (n) **Proposition** A

On November 5, 2002, the San Francisco voters passed Proposition A, which provides for the issuance of revenue bonds and/or other forms of indebtedness by the Commission in a principal amount not to exceed \$1,628,000 to finance the acquisition and construction of improvements to the City's Water System. As of June 30, 2011, there was no commercial paper outstanding pursuant to this authorization and \$1,331,815 of bonds had been issued in fiscal years 2006 and 2010 against this authorization.

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### (o) Proposition E

On November 5, 2002, the San Francisco voters passed Proposition E, which authorizes the Board of Supervisors' approval of the issuance of revenue bonds and/or other forms of indebtedness by the Commission to finance costs for the Commission's capital programs, including WSIP. As of June 30, 2011, the Board of Supervisors has authorized the issuance of \$3,097,131 in revenue bonds with \$1,422,655 issued against this authorization. Additionally, \$150,000 in commercial paper was outstanding pursuant to this authorization as of June 30, 2011.

# (8) Revenue Pledge

The Enterprise has pledged future revenues to repay various revenue bonds. Proceeds from the revenue bonds provided financing for various capital construction projects, and to refund previously issued bonds. The bonds are payable solely from revenues of the Enterprise and are payable through the year ending 2051.

The original amount of revenue bonds issued, total principal and interest remaining, principal and interest paid during 2011 and 2010, and applicable revenues for 2011 and 2010 are as follows:

	 2011	2010
Bonds issued with revenue pledge	\$ 3,400,560	2,421,205
Principal and interest remaining due at the end of the year	6,270,611	4,091,947
Principal and interest paid during the year	118,124	69,621
Net revenue for the year ended June 30	125,747	77,735
Funds available for revenue bond debt service	169,877	138,686

# (9) Certificates of Participation Issued for the 525 Golden Gate Avenue Headquarters Building

In October 2009, the City & County of San Francisco issued \$167,670 in certificates of participation to fund the future headquarters building of the San Francisco Public Utilities Commission (SFPUC) at 525 Golden Gate Avenue. The 2009 Series C were issued for \$38,120 and 2009 Series D for \$129,550 as "Build America Bonds" on a taxable basis under the 2009 American Recovery and Reinvestment Act. The 2009 Series C certificates carry interest rates ranging from 2.0% to 5.0% and mature on November 1, 2022. The 2009 Series D certificates carry interest rates ranging from 6.4% to 6.5% and mature on November 1, 2041, after adjusting for the Federal interest subsidy the true interest cost averages 3.4% and 4.3% for Series C & D, respectively.

Under the terms of a memorandum of understanding between the City and the SFPUC dated October 1, 2009, the City conveyed the real property to the Trustee, the Bank of New York Mellon Trust Company, N.A., under a property lease in exchange for the proceeds of the sale of the certificates. The Trustee has leased the property back to the City for the City's use under a Project Lease. The City will be obligated under the Project Lease to pay base rental payments and other payments to the Trustee each year during the thirty-two year term of the Project Lease. The Commission will make annual base rental payments to the

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

City for the building equal to annual debt service on the certificates. It is anticipated that these lease costs will be offset with reductions in costs associated with current office rental expense.

Each of the three Enterprises has an ownership interest in the building equal to their projected usage of space as follows: Water (73%), Wastewater (15%) and Power (12%). Similarly, each Enterprise is responsible for a portion of the annual Base Rental Payment based on their ownership percentages less contributed equity. The percentage share of Base Rental Payments for the Enterprises is as follows: Water (71.4%), Wastewater (18.9%), and Power (9.7%).

#### **Certificates of Participation 2009 Series C (tax-exempt)**

	]	Principal	Interest
Years ending June 30:			
2012	\$		1,263
2013		1,971	1,231
2014		2,035	1,164
2015		2,106	1,092
2016		2,199	1,000
2017 - 2021		12,813	3,189
2022 - 2023		6,094	309
		27,218	9,248
Less: Current portion			
Add: Unamortized bond premium		2,398	
Long-term portion as of June 30, 2011	\$	29,616	

Notes to Financial Statements

## June 30, 2011 and 2010

#### (Dollars in thousands, unless otherwise stated)

#### Certificates of Participation 2009 Series D (taxable)

		Principal	Interest before subsidy	Federal interest subsidy	Interest net of subsidy
Fiscal years ending June 30:	-			2010 22 03	
	¢		5.0(0	(2,000)	2.070
2012	\$		5,968	(2,089)	3,879
2013			5,968	(2,089)	3,879
2014			5,968	(2,089)	3,879
2015			5,968	(2,089)	3,879
2016			5,968	(2,089)	3,879
2017 - 2021			29,839	(10,445)	19,394
2022 - 2026		10,214	28,883	(10,109)	18,774
2027 - 2031		20,099	23,497	(8,223)	15,274
2032 - 2036		24,751	16,291	(5,702)	10,589
2037 - 2041		30,524	7,358	(2,575)	4,783
2042		6,911	224	(78)	146
		92,499	135,932	(47,577)	88,355
Less: Current portion					
Less: Unamortized bond premium	_				
Long-term portion as of June 30, 2011	\$	92,499			

#### (10) Wholesale Balancing Account

From 1984-2009, the Water Enterprise provided water service pursuant to the terms of the 1984 Settlement Agreement and Master Water Sales Contract, which establishes the basis for water rates to be charged to those customers (Wholesale Customers). The Master Water Sales Contract expired on June 30, 2009. The Commission and the Wholesale Customers approved a new Water Supply Agreement ("WSA") of a twenty-five year term with two options for five-year extensions. The existing 184 millions of gallons per day (mgd) Supply Assurance continues under the WSA and no increase in the Supply Assurance will be considered before December 31, 2018. During the period from 2009 to 2018, the WSA limits the quantity of water delivered to Retail Customers and Wholesale Customers for the watersheds to 265 mgd. Under the WSA, annual operating expenses including debt service on bonds sold to finance regional system improvements and regional capital projects funded from revenues will be allocated between Retail Customers' share of net book value of existing regional assets as of June 30, 2009 will be recovered on level annual payment over the twenty-five year term of the WSA at an interest rate of 5.13%. The WSA continues much of the rate setting, accounting, and dispute resolution provisions contained in the expired Contract, and has emergency and drought-pricing adjustment provisions.

Pursuant to the terms of the WSA, the City is required to establish water rates applicable to the Wholesale Customers annually. The wholesale water rates are based on an estimate of the level of revenues necessary to recoup the cost of distributing water to the Wholesale Customers in accordance with the methodology

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

outlined in Article V of the WSA (the Wholesale Revenue Requirement (WRR), previously known as the Suburban Revenue Requirement). During fiscal years ending in 2011 and 2010, the WRR, net of adjustments, charged to such suburban customers was \$142,201 and \$129,203, respectively. Such amounts are subject to final review by the Wholesale Customers, along with a trailing wholesale balancing account compliance audit of the Wholesale Revenue Requirement calculation.

Pursuant to Article VII, Section 7.02 of the WSA, the City is required to re-compute the WRR after the close of each fiscal year based on the actual costs incurred in the delivery of water to the Wholesale Customers. The difference between the wholesale revenues earned during the year and the "actual" WRR is recorded in a separate account (the Balancing Account) and represents the cumulative amount that is either owed to the Wholesale Customers (if the wholesale revenues exceed the WRR) or owed to the City (if the WRR exceeds the wholesale revenues paid). In accordance with Article VI of the WSA, the amount recorded in the Balancing Account shall earn interest at a rate equal to the average rate received by the City during the year on the invested pooled funds of the City Treasurer, and shall be taken into consideration in the determination of subsequent wholesale water rates. As of June 30, 2011 and 2010, the WSA. Subsequently, the June 30, 2010 amount was revised to a total of \$34,919, including \$15,195 under the new WSA and \$19,724 related to the prior contract, based on the audited final balancing account statement dated March 31, 2011.

Pursuant to Section 5.03 of the Water Supply Agreement, the Wholesale Customers agree that SFPUC previously advanced funds to acquire or construct Existing Assets used and useful in the delivery of water to both Wholesale Customers and Retail Customers. As of the expiration of the 1984 Agreement on June 30, 2009, the Wholesale Customers collectively owed the SFPUC \$397,023 for the pre-2009 water-related capital costs that have been and will be used to deliver water services to the Wholesale Customers. The balance due was \$380,535 and \$388,990, respectively as of June 30, 2011 and 2010. The WSA requires a 25-year repayment term, with level annual payments of \$28,214 which includes both principal and interest calculated at 5.13% annually. Pursuant to Section 5.03(F) of the WSA, the Wholesale Customers also have the option to prepay the entire amount owed or make partial prepayments of at least equal to \$10,000 or greater at any time during the 25-year term. Additionally, the SFPUC has previously appropriated funds, advanced through rates charged to Retail Customers, for construction of capital projects that were not yet placed into service as of June 30, 2009. The Wholesale Customers' share of these Construction Work In Progress costs will be calculated in accordance with the provisions in the WSA including a 10-year repayment term, which is required to begin in fiscal year 2014-15. The WSA also requires level annual principal and annual interest calculated at 4.00%. The final balance due and the associated 10-year amortization schedule will be determined as part of the fiscal year 2012-13 Wholesale Revenue audit.

## (11) Employee Benefits

## (a) Retirement Plan

*Plan Description* – The Enterprise participates in the City's single-employer defined benefit retirement plan (the Plan) which is administered by the San Francisco City and County Employees' Retirement System (the Retirement System). The Plan covers substantially all full-time employees of the Enterprise along with other employees of the City. The Plan provides basic service retirement,

Notes to Financial Statements

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(Dollars in thousands, unless otherwise stated)

disability, and death benefits based on specified percentages of final average salary, and provides cost-of-living adjustments after retirement. The Plan also provides pension continuation benefits to qualified survivors. The San Francisco City and County Charter and Administrative Code are the authority which establishes and amends the benefit provisions and employer obligations of the Plan.

*Funding Policy* – Contributions to the basic plan are made by both the Enterprise and its employees. Employee contributions are mandatory. Employee contribution rates for fiscal years 2011, 2010 and 2009 varied from 7.5% to 8.0% as a percentage of covered payrolls. Due to certain bargaining agreements, the Enterprise contributed from 0.5% to 8.0% of covered payroll on behalf of some employees. In addition, the Enterprise is required to contribute for 2011, 2010, and 2009 at an actuarially determined rate as a percentage of covered payroll of 13.6%, 9.5%, and 5.0%, respectively. The Enterprise contributed 100% of its required contribution of \$16,453 in 2011, \$12,283 in 2010 and \$6,946 in 2009.

The Retirement System issues a publicly available financial report for Citywide level that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to the San Francisco City and County Employees' Retirement System, 30 Van Ness Avenue, Suite 3000, San Francisco, CA 94102, or by calling (415) 487-7020.

# (b) Health Care Benefits

Health care benefits of the Enterprise employees, retired employees and surviving spouses are financed by beneficiaries and by the City through the City and County of San Francisco Health Service System (the Health Service System). The Enterprise's annual contribution, which amounted to approximately \$20,952 and \$19,347 in fiscal years 2011 and 2010, respectively, is determined by a San Francisco Charter provision based on similar contributions made by the 10 most populous counties in California.

Included in these amounts are \$5,214 and \$4,442 for 2011 and 2010, respectively, to provide postretirement benefits for retired employees, on a pay-as-you-go basis. There was no additional City allocation to the Enterprise's contribution allocation for payments made from the Health Service System for post-retirement health benefits in 2011 and 2010, respectively.

The City has determined a City-wide Annual Required Contribution (ARC), interest on net other post-employment benefits other than pensions (OPEB) obligation, ARC adjustment, and OPEB cost based upon an actuarial valuation performed in accordance with GASB 45, by the City's actuaries. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost of each year and any unfunded actuarial liabilities (or funding excess) amortized over thirty years. The City's allocation of the OPEB related costs to the Enterprise for the year ended June 30, 2011 based upon its percentage of City-wide payroll costs is presented below.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

The following table shows the components of the City's annual OPEB allocations for the Enterprise for the years ended June 30, 2011 and 2010, for the amount contributed to the plan, and changes in the City's net OPEB obligation (dollar amount in thousands):

	2011		2010	
Annual required contribution Interest on net OPEB Obligation Adjustment to ARC	\$	19,533 1,842 (1,445)	18,790 1,312 (1,029)	
Annual OPEB cost (expense)		19,930	19,073	
Contribution made		(5,214)	(4,442)	
Increase in net OPEB obligation		14,716	14,631	
Net OPEB obligation – beginning of year		45,598	30,967	
Net OPEB obligation – end of year	\$	60,314	45,598	

The City issues a publicly available financial report for Citywide level that includes the complete note disclosures and required supplementary information related to the City's post retirement health care obligations. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, CA 94102, or by calling (415) 554-7500.

# (12) Related Parties

Various common costs incurred by the Commission are allocated proratably between the Enterprise, Hetch Hetchy, and the Wastewater Enterprise. The allocations are based on the Commission management's best estimate and may change from year to year depending on the activities incurred by each Enterprise and the information available. The Commission allocated \$35,912 and \$32,508 in administrative costs to the Enterprise for the years ended June 30, 2011 and 2010, respectively.

The City performs certain administrative services such as maintenance of accounting records and investment of cash for all fund groups within the City. The various funds are charged for these services based on the City's indirect cost allocation plan. The overhead allocation paid to the General Fund of the City by the Enterprise was \$2,122 and \$1,007 for the years ended June 30, 2011 and 2010, respectively, and is included in other operating expenses in the accompanying financial statements.

The Enterprise purchases water from Hetch Hetchy Water. This amount, totaling \$29,747 for each of the years ended June 30, 2011 and 2010, has been included in the services provided by other departments in the accompanying financial statements.

The Enterprise purchases electricity from Hetch Hetchy Power at market rates. This amount, totaling \$6,591 and \$6,723 for the years ended June 30, 2011 and 2010, respectively, has been included in services provided by other departments in the accompanying financial statements.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

Since fiscal year 2008, the Enterprise has charged all City departments for water with the exception of fire hydrants for public safety purpose. In fiscal year 2011, the Enterprise delivered water for fire hydrant purposes totaling \$4, based on metered usage and applicable water rates, and the amount has been excluded from operating revenues in the accompanying financial statements.

A variety of City departments provide services such as engineering, purchasing, legal, data processing, telecommunications, and human resources to the Enterprise and charge amounts designed to recover those departments' costs. These charges, totaling \$9,971 and \$11,105 for the years ended June 30, 2011 and 2010, respectively, have been included in services provided by other departments in the accompanying financial statements.

During the fiscal year ending June 30, 2011, \$17,834 was transferred to other City departments, including \$13,638 to Hetch Hetchy Enterprise to finance improvements to certain up-country water storage and transmission facilities, \$2,643 to the Recreation and Park and Department of Public Works for landscape and irrigation project performed for the Water Enterprise, and \$1,080 transferred to special revenue fund for the surety bond program.

As of June 30, 2011, the Enterprise has receivables in the amount of \$6,122 due from the Wastewater Enterprise and Hetch Hetchy Enterprise for their respective allocable share of costs associated with the construction of the future SFPUC headquarters building located at 525 Golden Gate Avenue.

In May 2010, the City and County of San Francisco Board of Supervisors and Mayor approved the transfer of costs of operating, maintaining and improving the auxiliary water supply system (AWSS) from the Fire Department to the Enterprise. In June 2010, the voters of the City & County of San Francisco also approved Proposition B which authorizes a general obligation bond to implement improvements for fire, earthquake and emergency response and to ensure a reliable water supply for fires and disasters. The transfer of assets as well as AWSS operations was completed in the fiscal year 2011. The Fire Department has transferred \$6,510 in AWSS inventory and \$11,747 in capital assets to the Enterprise. In return, the Enterprise has transferred \$500 to the Fire Department. Additionally, the Enterprise has received \$8,397 of the general obligation bond proceeds for the improvements of the AWSS. The net total of these transfers and proceeds are reported as capital contributions in the Enterprise's financial statements.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

SFPUC entered into a seventy-five year lease agreement with the San Francisco Recreation and Park Commission for the use of parking spaces at the parking garage located at 355 McAllister Street beneath Civic Center Plaza which is in closer proximity to SFPUC's new headquarters at 525 Golden Gate Avenue. The term of the agreement commenced on February 1, 2011 with 40 parking spaces allocated to SFPUC. On or about April 1, 2012, SFPUC will have the right to an additional 20 parking spaces. The total payment under this agreement is \$6,274 and the first payment in the amount of \$1,500 was made in the fiscal year ending June 30, 2011. Of this \$1,500, SFPUC recognized \$40 as expenses for the 40 parking spaces rented between February and June, 2011 at \$8 per month. The remaining \$1,460 was recognized as prepaid. The expenses and prepayment were prorated and allocated among the three SFPUC Enterprises based on the use of parking spaces. The remaining payments will be made as follows:

	Amount
Fiscal years ending June 30:	
2012	\$ 1,500
2013	1,500
2014	1,500
2015	 274
Total	\$ 4,774

In fiscal year ending June 30, 2010-11, the Water Enterprise's allocable share of expenses and prepayment was \$39 and \$401, respectively.

Amount

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

#### (13) Risk Management

The Enterprise's risk management program includes both self-insured and insured exposures at risk. Risk assessments and purchasing of insurance coverage are collaboratively coordinated by SFPUC Risk Management and the City's Office of Risk Management. With certain exceptions, the City and the Enterprise's general policy is to first evaluate the exposure at risk for self-insurance. Based on this analysis, internal mitigation strategies and financing through a 'self-retention' mechanism is generally more economical as the SFPUC administers, adjusts, settles, defends, and pays claims from budgeted resources (i.e. pay-as-you-go fund). When economically more viable or when required by debt financing covenants, the Enterprise obtains commercial insurance. At least annually, the City actuarially determines general liability and workers' compensation risk exposures. The Enterprise does not maintain commercial earthquake coverage, with certain minor exceptions, such as a sub-limit for fire-sprinkler leakage due to earthquake under the Property Insurance program.

Primary risks	Typical coverage approach		
General Liability	Self-Insured		
Property	Purchased Insurance and Self-Insured		
Workers' Compensation	Self-Insured through Citywide Pool		
Other risks	Typical coverage approach		
Surety Bonds	Purchased and Contractually Transferred		
Professional Liability	Combination of Self-Insured, Purchased Insurance and Contractual Risk Transfer		
Errors & Omissions	Combination of Self-Insured, Purchased Insurance and Contractual Risk Transfer		
Builders' Risk	Purchased Insurance and Contractual Risk Transfer		
Public Officials Liability	Purchased Insurance		

#### (a) Damage Claims Liability

Through coordination with the Controller and the City Attorney's Office, the general liability risk exposure is actuarially determined and is addressed through pay-as-you-go funding as part of the budgetary process. Associated costs are also booked as expenses as required under Generally Accepted Accounting Principles (GAAP) for financial statement purposes for both the Enterprise and the City and County of San Francisco's Comprehensive Annual Financial Report (CAFR). The claim expense allocations are determined based on actuarially determined anticipated claim payments and the projected timing of disbursement.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

The changes for the damage claims liabilities for the years ended June 30, 2011 and 2010 are as follows:

	_	Beginning of year	Claims and changes in estimates	Claims paid	End of year
2009 - 2010	\$	9,641	26,835	(6,736)	29,740
2010 - 2011		29,740	6,815	(9,565)	26,990

## (b) *Property*

The Enterprise's property risk management approach varies depending on whether the facility is currently under construction, or if the property is part of revenue-generating operations. For new construction projects, the Enterprise has utilized traditional insurance, or other alternative insurance programs. Under the latter approach, the insurance program usually provides coverage for the entire construction project, along with multiple risk coverage, such as for general liability, property damage and workers' compensation, for example. When a traditional insurance program is used for property risks, the Enterprise requires each contractor to provide its own insurance, while ensuring that the full scope of work be covered with satisfactory levels to limit the Enterprise's risk exposure. The majority of purchased insurance program is for either: 1) revenue-generating facilities, 2) debt-financed facilities, or 3) mandated coverage to meet statutory requirements for bonding of various public officials.

## (c) Workers' Compensation

The City actuarially determines and allocates workers' compensation costs to the Enterprise according to a formula based on the following: (i) the dollar amount of claims; (ii) yearly projections of payments based on historical experience; and (iii) the size of the Enterprise's payroll. The administration of workers' compensation claims and payouts are handled by the Workers' Compensation Division of the City's Department of Human Resources. Statewide workers' compensation reforms have resulted in budgetary savings in recent years. The City continues to develop and implement improved programs, such as return-to-work programs, to lower or mitigate the growth of workers' compensation costs. Programs include: accident prevention, investigation and duty modification for injured employees with medical restrictions so return to work can occur as soon as possible.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

The changes in the liabilities for workers' compensation for the years ended June 30, 2011 and 2010 are as follows:

	_	Beginning of year	Claims and changes in estimates	Claims paid	End of year	
2009 - 2010	\$	8,617	1,624	(2,147)	8,094	
2010 - 2011		8,094	2,030	(2,449)	7,675	

# (d) Surety Bonds and Public Official Liability

Bonds are required in most phases of the public utilities construction contracting process for such phases as bid, performance, and payment or maintenance. Additionally, bonds may be required in other contracts where goods or services are provided to ensure compliance with applicable terms and conditions such as warranty. All public officials with financial oversight responsibilities are provided coverage through a commercial Public Official Liability policy. The Enterprise also maintains a commercial crime policy in lieu of bonding its employees.

## (e) Professional Liability, Errors and Omissions

Professional liability policies are either directly purchased insurance on behalf of the Enterprise, transferred through contract to the contracted professional, or retained through self-insurance on a case by case basis depending on the size, complexity or scope of construction or professional service contracts. Examples of contracts providing any form of the coverage described are engineers, architects, design professionals and other licensed or certified professional service providers.

## (f) Builders' Risk

Builder's risk policies of insurance are required to be provided by the contractor on all construction projects for the full value of construction.

## (14) Commitments and Litigation

## (a) Commitments

As of June 30, 2011 and 2010, the Enterprise has outstanding commitments with third parties of \$1,168,888, and \$913,560, respectively, for various capital projects and other purchase agreements for materials and services.

## (b) Grants

Grants that the Enterprise receives are subject to audit and final acceptance by the granting agency. Current and prior year costs of such grants are subject to adjustment upon audit.

Notes to Financial Statements

June 30, 2011 and 2010

(Dollars in thousands, unless otherwise stated)

#### (c) Litigation

The Enterprise is a defendant in various legal actions and claims that arise during the normal course of business. The final disposition of those legal actions and claims is not determinable. However, in the opinion of management, the outcome of any litigation of these matters will not have a material effect on the financial position or changes in net assets of the Enterprise.

## (15) Subsequent Events

#### (a) Credit Rating Change

On July 18, 2011, Moody's Investors Service, Inc., lowered its municipal bond rating on all outstanding Water Revenue Bonds from "Aa2" to "Aa3" with a stable outlook while S&P maintained its rating on all outstanding Water Revenue Bonds at "AA-" with a stable outlook.

The explanation of the significance of Moody's rating, and any outlook associated with this rating, may be obtained from Moody's Investors Service, Inc. The ratings assigned by Moody's express only the views of such rating agency, and is based upon its own investigations, studies, and assumptions. There is no assurance such ratings will continue for any given period or that such ratings will not be revised downward or withdrawn entirely by such rating agency, if in its judgment, circumstances so warrant. Any such downward revision or withdrawal of the rating may have an adverse effect on the market price of the Bonds. The SFPUC undertakes no responsibility to maintain its current ratings on the Bonds or to oppose any such downward revision, suspension or withdrawal.

# (b) Water Revenue Bonds Series 2011 ABCD

On July 21, 2011, \$720,750 in Water Revenue Bonds were issued as 2011 Series ABCD. This transaction closed on August 4, 2011. Of this amount, \$55,465 were refunding bonds issued as 2011 Sub Series D, which refunded a portion of 2001 Series A and 2002 Series A Water Revenue Bonds. This refunding resulted in \$3,311, or 5.8%, in net present value savings.

## (c) Commercial Paper

An additional \$24,000 in taxable commercial paper was issued on July 27, 2011. On July 28, 2011, \$61,000 in taxable commercial paper was issued to refund \$61,000 of outstanding commercial paper maturing on August 1, 2011 and August 3, 2011.

## (d) Litigation

On September 27, 2011, the Board of Supervisors authorized the settlement of claims arising out of nine lawsuits involving Mitchell Engineering, and the issuance of settlement bonds of \$14,080.



KPMG LLP Suite 1400 55 Second Street San Francisco, CA 94105

# 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*

The Honorable Mayor and Board of Supervisors City and County of San Francisco, California:

We have audited the financial statements of the San Francisco Water Enterprise (the Enterprise), an enterprise fund of the City and County of San Francisco, California (the City) as of and for the year ended June 30, 2011, and have issued our report thereon dated October 28, 2011. We conducted our audit 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.

# **Internal Control over Financial Reporting**

In planning and performing our audit, we considered the Enterprise's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Enterprise's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Enterprise's internal control over financial reporting.

A deficiency in internal control over financial reporting 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 combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

# **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Enterprise's financial statements are free of 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*.

This report is intended solely for the information and use of management, the City and County of San Francisco Government Audit and Oversight Committee, the Commission, and others within the entities, and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

October 28, 2011

# **APPENDIX F**

# PROPOSED FORM OF OPINION OF CO-BOND COUNSEL

[Closing Date]

City and County of San Francisco San Francisco, California

\$

Public Utilities Commission of the City and County of San Francisco San Francisco Water Revenue Bonds 2012 Series ABC

Ladies and Gentlemen:

We have acted as co-bond counsel to Public Utilities Commission of the City and County of San Francisco (the "Commission"), a Commission duly constituted under the Charter (the "Charter") of the City and County of San Francisco (the "City"), in connection with the issuance of its San Francisco Water Revenue Bonds, 2012 Series ABC 2012 Sub-Series A (WSIP), in the aggregate principal amount of \$\_\_\_\_\_, its San Francisco Water Revenue Bonds, 2012 Series ABC 2012 Sub-Series B (Prop. A Reimbursement), in the aggregate principal amount of \_\_\_\_\_, and its San Francisco Water Revenue Bonds, 2012 Series ABC 2012 Sub-Series \$ C (Refunding), in the aggregate principal amount of \$\_\_\_\_\_ (collectively, the "Bonds"). The Bonds are being issued pursuant to authority granted by the Charter of the City, including Proposition A approved by the voters of the City on November 5, 2002 and Proposition E approved by the voters of the City on November 5, 2002, and an Amended and Restated Indenture, dated as of August 1, 2002, by and between the Commission and U.S. Bank National Association, as trustee (the "Trustee"), as amended and supplemented (the "Original Indenture"), and as further supplemented by a Sixteenth Supplemental Indenture, dated as of June 1, 2012 (the "Sixteenth Supplemental Indenture"), by and between the Commission and the Trustee, a Seventeenth Supplemental Indenture, dated as of June 1, 2012 (the "Seventeenth Supplemental Indenture") by and between the Commission and the Trustee, and an Eighteenth Supplemental Indenture, dated as of June 1, 2012 (the "Eighteenth Supplemental Indenture" and together with the Original Indenture, the Sixteenth Supplemental Indenture, and the Seventeenth Supplemental Indenture, the "Indenture") by and between the Commission and the Trustee. Capitalized terms not otherwise defined herein shall have the respective meanings ascribed thereto in the Indenture.

In our capacity as co-bond counsel, we have reviewed the Indenture, certifications of the Commission, the Trustee and others, opinions of counsel to the Commission and the Trustee, and such other documents, opinions and instruments as we deemed necessary to render the opinions

set forth herein. We have assumed, but have not verified, that the signatures on all documents, certificates and opinions that we have reviewed are genuine. In our examination, we have assumed, but have not verified, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies or by facsimile or other means of electronic transmission or which we obtained from sites on the internet, and the authenticity of the originals of such latter documents. As to facts and certain other matters and the consequences thereof relevant to the opinions expressed herein and the other statements made herein, we have relied without investigation or verification upon, and assumed the accuracy and completeness of certificates, letters (including opinion letters), and oral and written statements and representations of public officials, officers and other representatives of the Commission and the City, counsel for the City, and others.

Our services as co-bond counsel were limited to such examination and to rendering the opinions set forth below. Furthermore, we have assumed compliance with all 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 tax purposes. With respect to the opinions expressed herein, we call attention to the fact that the enforceability of the rights and obligations under the Bonds and the Indenture are subject to bankruptcy, insolvency, reorganization, arrangement, moratorium and other similar laws 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 cities and counties in the State of California. In addition, the imposition of certain fees and charges by the Commission relating to the Enterprise is subject to the provisions of Articles XIII C and XIII D of the California Constitution.

Based upon the foregoing and subject to the limitations and qualifications herein specified, as of the date hereof, we are of the opinion, under existing law, that:

(1) The Bonds have been duly authorized, executed and delivered by, and constitute the valid and binding special limited obligations of, the Commission.

(2) The Indenture has been duly authorized, executed and delivered by, and constitutes the valid and binding obligation of, the Commission. The Indenture creates a valid pledge of the Revenues of the Enterprise and certain other amounts held by the Trustee under the Indenture (including, with respect to the Bonds, amounts held in the 2012 Series ABC Bond Reserve Account) to secure the payment of the principal of and interest on the Bonds, 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 Bonds are special limited obligations of the Commission and are payable exclusively from and are secured by a pledge of the Revenues of the Enterprise and certain amounts held under the Indenture. The general fund of the City is not liable and the credit or taxing power of the City is not pledged for the payment of the Bonds or the interest thereon. The Commission has no taxing power. The Bonds are not secured by a legal or equitable pledge of, or charge, lien or encumbrance upon, any of the property of the City or of the Commission or any of its income or receipts, except the Revenues.

(4) Bonds and other parity debt of the Commission have been and from time to time hereafter may be issued under the Indenture which are payable from Revenues of the Enterprise on a parity basis with the Bonds.

(5) Assuming continuing compliance by the Commission with certain covenants in the Indenture and other documents pertaining to the Bonds and requirements of the Internal Revenue Code of 1986, as amended, regarding the use, expenditure and investment of bond proceeds and the timely payment of certain investment earnings to the United States, interest on the Bonds is not includable in the gross income of the owners of the Bonds for purposes of federal income taxation. Interest on the Bonds is not treated as an item of tax preference in calculating the federal alternative minimum taxable income of individuals or corporations. Interest on the Bonds, however, is included as an adjustment in the calculation of federal corporate alternative minimum taxable income and may, therefore, affect a corporation's alternative minimum tax liability. We express no opinion as to any other federal income tax consequences caused by ownership of or receipt of interest on the Bonds.

(6) Interest on the Bonds is exempt from personal income tax imposed by the State of California.

Other than as described herein, we have not addressed, and are not opining on, the tax consequences to any person of the investment in, or of the receipt of interest on, the Bonds. Further, certain requirements and procedures contained or referred to in the Indenture or in other documents pertaining to the Bonds may be changed, and certain actions may be taken, under the circumstances and subject to the terms and conditions set forth in such documents, upon the advice or with the approving opinion of counsel nationally recognized in the area of tax-exempt obligations. We express no opinion as to the effect of any change to any document pertaining to the Bonds or of any action taken or not taken where such change is made or action is taken or not taken without our approval or in reliance upon the advice of counsel other than ourselves with respect to the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

The opinions expressed and the statements made herein are based on an analysis of existing laws, regulations, rulings and court decisions. Such opinions and statements may be adversely affected by actions taken or events occurring, including a change in law, regulation or ruling (or in the application or official interpretation of any law, regulation or ruling) after the date hereof. We have not undertaken to determine, or to inform any person, whether such actions are taken or such events occur, and we have no obligation to update this letter in light of such actions or events or for any other reason.

No opinion is expressed herein on the accuracy, completeness or sufficiency of the Official Statement or other offering material relating to the Bonds.

This opinion is limited to the laws of the State of California and the federal laws of the United States. The opinions in this letter are expressed solely as of the date hereof for your benefit and may not be relied upon in any manner for any purposes by any other person.

Respectfully submitted,

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#### **APPENDIX G**

#### FORM OF CONTINUING DISCLOSURE CERTIFICATE

#### 5 PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO WATER REVENUE BONDS, 2012 SERIES ABC

This Continuing Disclosure Certificate (the "Disclosure Certificate") is executed and delivered by the Public Utilities Commission of the City and County of San Francisco (the "SFPUC") in connection with the issuance of the water revenue bonds captioned above (the "2012 Series ABC Bonds"). The 2012 Series ABC Bonds are being issued pursuant to an Amended and Restated Indenture, dated as of August 1, 2002, between the SFPUC and U.S. Bank National Association, as trustee (the "Trustee"), as amended and supplemented, including as amended and supplemented by a Sixteenth Supplemental Indenture, a Seventeenth Supplemental Indenture, and an Eighteenth Supplemental Indenture, each dated as of June 1, 2012, and each by and between the SFPUC and the Trustee (collectively, the "Indenture").

The SFPUC covenants and agrees as follows:

**SECTION 1. Purpose of the Disclosure Certificate**. This Disclosure Certificate is being executed and delivered by the SFPUC for the benefit of the Holders and Beneficial Owners of the 2012 Series ABC Bonds and in order to assist the Participating Underwriters in complying with Securities and Exchange Commission (the "S.E.C.") Rule 15c2-12(b)(5).

**SECTION 2. Definitions**. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

"Annual Report" shall mean any Annual Report provided by the SFPUC pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

"Beneficial Owner" shall mean any person that: (a) has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2012 Series ABC Bonds (including persons holding 2012 Series ABC Bonds through nominees, depositories or other intermediaries) including, but not limited to, the power to vote or consent with respect to any 2012 Series ABC Bonds or to dispose of ownership of any 2012 Series ABC Bonds; or (b) is treated as the owner of any 2012 Series ABC Bonds for federal income tax purposes.

"Dissemination Agent" shall mean the SFPUC, acting in its capacity as Dissemination Agent under this Disclosure Certificate, or any successor Dissemination Agent designated in writing by the SFPUC and which has filed with the SFPUC a written acceptance of such designation.

"Holder" shall mean either the registered owners of the 2012 Series ABC Bonds, or, if the 2012 Series ABC Bonds are registered in the name of The Depository Trust Company or another recognized depository, any applicable participant in such depository system.

"Listed Events" shall mean any of the events listed in Section 5(a) of this Disclosure Certificate.

"MSRB" shall mean the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive continuing disclosure filings 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 final Official Statement, dated \_\_\_\_\_, 2012, prepared in connection with the sale and offering of the 2012 Series ABC Bonds.

"Participating Underwriter" shall mean any of the original underwriters or purchasers of the 2012 Series ABC Bonds required to comply with the Rule in connection with the offering of the 2012 Series ABC Bonds.

"Rule" shall mean Rule 15c2-12(b)(5) adopted by the S.E.C. under the Securities Exchange Act of 1934, as the same may be amended from time to time.

## SECTION 3. Provision of Annual Reports.

(a) The SFPUC shall, or shall cause the Dissemination Agent to, not later than 9 months after the end of the SFPUC's fiscal year (which currently ends June 30), commencing March 31, 2013, with the report for the 2011-12 Fiscal Year, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate. If the Dissemination Agent is not the SFPUC, the SFPUC shall provide the Annual Report to the Dissemination Agent not later than 15 days prior to said date. The Annual Report must be submitted in electronic format and accompanied by such identifying information as is prescribed by the MSRB, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate. However, if the audited financial statements of the SFPUC are not available by the date required above for the filing of the Annual Report, the SFPUC shall submit unaudited financial statements and submit the audited financial statements as soon as they are available. If the SFPUC'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 SFPUC is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the SFPUC shall send a notice to the MSRB in substantially the form attached as Exhibit A.

(c) The Dissemination Agent shall (if the Dissemination Agent is other than the SFPUC), file a report with the SFPUC certifying the date that the Annual Report was provided to the MSRB pursuant to this Disclosure Certificate.

**SECTION 4.** Content of Annual Reports. SFPUC's Annual Report shall contain or incorporate by reference the following information:

(a) Audited Financial Statements of the municipal water supply, storage and distribution system of the SFPUC for the prior fiscal year, prepared in accordance with generally accepted accounting principles applicable to the SFPUC from time to time. If the SFPUC's audited financial statements are not available by the date the Annual Report is required to be filed, the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available;

(b) An update for the prior fiscal year of the table in the Official Statement entitled "TABLE 1, HISTORIC WHOLESALE AND RETAIL WATER SALES";

(c) Until the later of March 31, 2018, or the completion date of the SFPUC's Water System Improvement Program, an update for the prior fiscal year of the table in the Official Statement entitled "TABLE D-2, WSIP BUDGET AND SPENDING SUMMARY";

(d) Until the later of March 31, 2018, or the completion date of the SFPUC's Water System Improvement Program, an update for the prior fiscal year of the table in the Official Statement entitled "TABLE D-3, STATUS OF WSIP PROJECTS";

(e) An update for the prior fiscal year of the table in the Official Statement entitled "TABLE 14, HISTORICAL PERCENTAGE INCREASES (DECREASES) IN WHOLESALE WATER

RATES," provided that such update need include rate increases (decreases) through the end of the prior fiscal year;

(f) An update for the prior fiscal year of the table in the Official Statement entitled "TABLE 17, HISTORICAL AND APPROVED FUTURE PERCENTAGE INCREASES (DECREASES) IN RETAIL WATER RATES," provided that such update need include rate increases (decreases) through the end of the prior fiscal year;

(g) An update for the prior fiscal year of the table in the Official Statement in the section entitled "OBLIGATIONS PAYABLE FROM REVENUES – Outstanding Parity Revenue Bonds" showing all bonds of the SFPUC secured by Revenues; and

(h) An update for the prior fiscal year of the table in the Official Statement entitled "TABLE 24, HISTORICAL REVENUES, OPERATING & MAINTENANCE EXPENSES AND DEBT SERVICE COVERAGE."

Any or all of the items listed above may be set forth in a document or set of documents, or may be included by specific reference to other documents, including official statements of debt issues of the SFPUC or related public entities, which are available to the public on the MSRB website. If the document included by reference is a final official statement, it must be available from the MSRB. The SFPUC shall clearly identify each such other document so included by reference.

## SECTION 5. Reporting of Significant Events.

(a) The SFPUC shall give, or cause to be given, notice of the occurrence of any of the following Listed Events with respect to the 2012 Series ABC Bonds:

- 1. Principal and interest payment delinquencies.
- 2. Non payment related defaults, if material.
- 3. Unscheduled draws on debt service reserves reflecting financial difficulties.
- 4. Unscheduled draws on credit enhancements reflecting financial difficulties.
- 5. Substitution of credit or liquidity providers, or their failure to perform.
- 6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the 2012 Series ABC Bonds, or other material events affecting the tax exempt status of the 2012 Series ABC Bonds.
- 7. Modifications to rights of security holders, if material.
- 8. Bond calls, if material, and tender offers.
- 9. Defeasances.
- 10. Release, substitution, or sale of property securing repayment of the 2012 Series ABC Bonds, if material.
- 11. Rating changes.
- 12. Bankruptcy, insolvency, receivership or similar event of the SFPUC.

- 13. The consummation of a merger, consolidation, or acquisition involving the SFPUC or the sale of all or substantially all of the assets of the SFPUC, 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.
- 14. Appointment of a successor or additional trustee or the change of name of a trustee, if material.
- 15. The Effective Date of any provisions of the Fifth Supplemental Indenture.

(b) Whenever the SFPUC obtains knowledge of the occurrence of a Listed Event, and, if the Listed Event is described in subsections (a)(2), (a)(6), (a)(7), (a)(8) (if the event is a bond call), (a)(10), (a)(13) or (a)(14) above, the SFPUC determines that knowledge of the occurrence of that Listed Event would be material under applicable federal securities law, the SFPUC shall, or shall cause the Dissemination Agent (if not the SFPUC) to, file a notice of such occurrence with the MSRB, in an electronic format as prescribed by the MSRB, in a timely manner not in excess of 10 business days after the occurrence of the Listed Event. Notwithstanding the foregoing, notice of Listed Events described in subsections (a)(8) and (9) above need not be given under this subsection any earlier than the notice (if any) of the underlying event is given to holders of affected 2012 Series ABC Bonds under the Indenture.

(c) For purposes of this Certificate, any event described in paragraph (a)(12) above is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the SFPUC 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 SFPUC, 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 having 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 said party.

**SECTION 6.** Termination of Reporting Obligation. The SFPUC's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2012 Series ABC Bonds. If such termination occurs prior to the final maturity of the 2012 Series ABC Bonds, the SFPUC shall give notice of such termination in the same manner as for a Listed Event under Section 5(c).

**SECTION 7. Dissemination Agent**. The SFPUC may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate.

**SECTION 8.** Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the SFPUC may amend or waive this Disclosure Certificate or any provision of this Disclosure Certificate, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 3(b), 4 or 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 2012 Series ABC Bonds or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of the City Attorney or nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2012 Series ABC 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 either (i) is approved by the owners of a majority in aggregate principal amount of the 2012 Series ABC Bonds or (ii) does not, in the opinion of the City Attorney or nationally recognized bond counsel, materially impair the interests of the Holders.

In the event of any amendment or waiver of a provision of this Disclosure Certificate, the SFPUC 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 SFPUC. 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; 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.** Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the SFPUC from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate 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 Certificate. If the SFPUC 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 Certificate, the SFPUC shall have no obligation under this Disclosure Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

**SECTION 10. Default**. In the event of a failure of the SFPUC to comply with any provision of this Disclosure Certificate, any Participating Underwriter, Holder or Beneficial Owner of the 2012 Series ABC Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the SFPUC to comply with its obligations under this Disclosure Certificate; provided that any such action may be instituted only in a federal or State court located in the City and County of San Francisco, State of California. Failure by the SFPUC to comply with any provision of this Disclosure Certificate shall not be deemed an Event of Default under the Indenture and the sole remedy under this Disclosure Certificate in the event of any failure of the SFPUC to comply with this Disclosure Certificate shall be an action to compel performance.

**SECTION 11.** Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the SFPUC, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2012 Series ABC Bonds, and shall create no rights in any other person or entity.

Date: \_\_\_\_\_, 2012.

PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO

By\_\_\_\_

Edward M. Harrington General Manager

Approved as to Form:

DENNIS J. HERRERA CITY ATTORNEY

By:\_\_\_

Deputy City Attorney

## CONTINUING DISCLOSURE CERTIFICATE EXHIBIT A

FORM OF NOTICE TO THE MUNICIPAL SECURITIES RULEMAKING BOARD OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer:PUBLIC UTILITIES COMMISSION OF THE<br/>CITY AND COUNTY OF SAN FRANCISCOName of Issue:PUBLIC UTILITIES COMMISSION OF THE<br/>CITY AND COUNTY OF SAN FRANCISCO<br/>SAN FRANCISCO WATER REVENUE BONDS,<br/>2012 SERIES ABC

Date of Issuance: \_\_\_\_\_, 2012

NOTICE IS HEREBY GIVEN that the SFPUC has not provided an Annual Report with respect to the above-named Bonds as required by Section 3 of the Continuing Disclosure Certificate of the Public Utilities Commission of the City and County of San Francisco, dated \_\_\_\_\_\_, 2012. The SFPUC anticipates that the Annual Report will be filed by \_\_\_\_\_\_.

Dated:\_\_\_\_\_

#### PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO

By:\_\_\_\_\_ [to be signed only if filed] Title\_\_\_\_\_\_

#### APPENDIX H

#### SECURITIES DEPOSITORY AND BOOK-ENTRY SYSTEM

The information in this APPENDIX has been provided by DTC for use in securities offering documents, and the SFPUC takes no responsibility for the accuracy or completeness thereof. The SFPUC cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute to the beneficial owners either (a) payments of interest, principal or premium, if any, with respect to the Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement. 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 Participants are on file with DTC.

As used in this Appendix, "Securities" means the 2012 Series ABC Bonds, "Issuer" means the SFPUC, and "Agent" means the Trustee.

1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the securities (the "Securities"). The Securities 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 Security certificate will be issued for each issue of the Securities, each in the aggregate principal amount of such issue, and will be deposited with DTC. If, however, the aggregate principal amount of any issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.

2. 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 bookentry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC 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 its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com. The information contained on this Internet site is not incorporated herein by reference.

3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("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 Securities 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 Securities, except in the event that use of the book-entry system for the Securities is discontinued.

4. To facilitate subsequent transfers, all Securities 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 Securities 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 Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities 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.

5. 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 Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities 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.

6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue 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.

7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer 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 Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions, and dividend payments on the Securities 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 Issuer or Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, 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.

9. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.

10. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

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

