



San Francisco
Water Power Sewer

Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 4th Floor
San Francisco, CA 94102

February 3, 2023

Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689

Dear Ms. Calvillo,

Please see the enclosed Certificates as required under 2002 Proposition E related to the following authorizing legislation:

- Wastewater Enterprise: File No. 220500 and Board of Supervisors Ordinance No. 110-22

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Nikolai J. Sklaroff
Capital Finance Director
San Francisco Public Utilities Commission
Office: (415) 551-2973

London N. Breed
Mayor

Newsha K. Ajami
President

Sophie Maxwell
Vice President

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Commissioner

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Commissioner

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Commissioner

Dennis J. Herrera
General Manager

OUR MISSION: To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.





Certificate of City and County of San Francisco Planning Department Regarding Proposed Sale of Wastewater Revenue Bonds, Including Notes, Commercial Paper, and Other Forms of Indebtedness, with a combined not to exceed issuance amount of \$704,198,901 for Capital Projects budgeted in Fiscal Year 2022-23

I, Lisa M. Gibson, Environmental Review Officer of the Planning Department of the City and County of San Francisco (the Planning Department), hereby certify as follows:

1. As the Environmental Review Officer (ERO) of the Planning Department, I am authorized to certify as to the compliance of the San Francisco Public Utilities Commission (SFPUC) with applicable requirements of the California Environmental Quality Act (CEQA).
2. After consultation with the SFPUC, I understand that the SFPUC proposes to sell Wastewater Revenue Bonds and Other Forms of Indebtedness (the "Revenue Indebtedness") to finance certain improvements to the Wastewater Enterprise of the City and County of San Francisco (the "City"). The improvements proposed for financing include those projects described in the following document, attached to this Certificate as Exhibit A and may represent a subset of the total available authorization.
3. I understand that Section 8B.124 of the City Charter grants authority to the City's Board of Supervisors to approve the issuance of Revenue Indebtedness, including revenue bonds, notes, and commercial paper, by ordinance upon two-thirds vote of its members and under certain conditions. The ordinance related to the debt issuance, is attached hereto as Exhibit B (the Ordinance).
4. I understand that one of the conditions to the Board of Supervisor's authorization of such Revenue Indebtedness is the delivery of a certificate of the Planning Department regarding the projects or additional projects to be financed under the authorization provided in Exhibit B, the Ordinances.
5. The San Francisco Planning Commission certifies Environmental Impact Reports as they are completed pursuant to CEQA. In addition, the Planning Department approves Initial Study/Mitigated Negative Declarations, and the ERO approves Categorical Exemptions.
6. Based on a preliminary review of the additional Projects and discussions with the SFPUC regarding the requirements for undertaking such additional Projects, I certify that the Projects under the jurisdiction of the SFPUC to be funded with proceeds of the Revenue Indebtedness, as described in the Ordinance, (a) are not considered to be projects under CEQA, (b) are projects under CEQA and a CEQA determination has already been issued, or (c) are projects under CEQA and will undergo CEQA review prior to approval. Pursuant to the provisions of Chapter 31 of the San Francisco Administrative Code, any additional Project to be financed will comply with applicable requirements of CEQA prior to any draw on the Revenue Indebtedness proceeds to finance the acquisition or construction of such facilities.

In witness whereof, the undersigned has executed this certification as of this 2nd day of August, 2022.

Lisa M. Gibson
Environmental Review Officer

EXHIBIT A
WASTEWATER ENTERPRISE REVENUE BONDS AND OTHER FORMS OF INDEBTEDNESS
FY 2022-2023 CAPITAL IMPROVEMENT PROJECTS

Program	Project Number	Project Title	CEQA Compliance
Sewer System Improvement Program (SSIP)	15733	WW SSIP Program-Wide Management	The individual projects are projects under CEQA and will undergo CEQA review prior to approval.
SSIP	10015796 (CWWSIPDP)	WW SSIP Biosolids-Digester Facilities Project	The Planning Commission certified the Biosolids Digester Facilities Project Final Environmental Impact Report (EIR) on March 8, 2018 (Case No. 2015-000644ENV).
SSIP	10015807 (CWWSIPSE02)	WW Treatment Plant Improvement – Southeast Plant-New Headworks (Grit) Replacement	The Final MND was issued on December 19, 2016 (Case No. 2015-006224ENV). An Addendum was issued on March 7, 2019.
SSIP	10015809 (CWWSIPSE07)	SEP Facility-wide Distributed Control System (DCS) Control Upgrades	This is not a project under CEQA §15378.
SSIP	10002284 (CWWSIPSE10)	SEP Power Feed and Primary Switchgear Upgrades	A Categorical Exemption determination was issued on February 22, 2018 (Case No. 2017-015855ENV).
SSIP	15735	WW Treatment Plant Improvement – Southeast Plant Improvements	SEP-1; SEP 550 Booster Pump Station Condition Inspection and Interim Upgrades This is a project under CEQA and will undergo CEQA review prior to approval. SEP-2; SEP, Booster PS, & BFS Security Enhancements – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-3; Oxygen Generation (SEP 275) Reliability Upgrades – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-4; SEP Facilities Interim H&S Improvements (SEP 850 & 930) – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-5; Primary Treatment (SEP 040/041) H&S Improvements – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-6; Secondary Clarifiers (SEP 230) Rehabilitation – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-7; New Trades and Maintenance Buildings – This is a project under CEQA and will undergo CEQA review prior to approval.

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			SEP-8; SEP Condition Improvement Projects - Part 1 – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-9; Pipe Gallery (SEP 960) Rehab – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-10; Aeration Tanks (SEP 200) Rehab-Condition Assess & Planning – This is a project under CEQA and will undergo CEQA review prior to approval. SEP-13; Maintenance Building (SEP 940) Interim Improvement – This is a project under CEQA and will undergo CEQA review prior to approval.
SSIP	15736	WW Treatment Plant Improvement – North Point Facility (NPF) Improvements	10026822 North Shore Wet Weather Pump Station Imp. And Disinfection – A Categorical Exemption determination was issued on October 13, 2017 (Case No. 2017-010521 ENV). NPF-1; Sedimentation (NPF 040/041) Tanks Condition Improvements – This is a project under CEQA and will undergo CEQA review prior to approval. NPF-2/10037325; Admin Bldg (NPF 930) Evaluation & Interim H&S Improvements– This is a project under CEQA and will undergo CEQA review prior to approval. NPF-3; Dechlorination Process (NPF 500) Evaluation & Interim Upgrades – This is a project under CEQA and will undergo CEQA review prior to approval. NPF-5/10037904; NPF & NSS Security Enhancements – This is a project under CEQA and will undergo CEQA review prior to approval. NPF-6/10038353 NPF DCS Upgrades (Construction) – This is a project under CEQA and will undergo CEQA review prior to approval. NPF-8 North Shore PS (WW) Improvements This is a project under CEQA and will undergo CEQA review prior to approval.
SSIP	10029736 (CWWSIPTPOP02)	Westside Pump Station Reliability Improvements	A Categorical Exemption determination was issued on April 20, 2017 (Case No. 2016-014160ENV). A Determination of no Substantial Modification was issued on February 25, 2020.
SSIP	15756	Oceanside Treatment Plant (OSP)	OSP-1 Westside FM Reliability Project This is a project under CEQA and will undergo CEQA review prior to approval. OSP-2/10037734 Solids Thickening (Oceanside Plant (OSP 011)) Process Upgrade This is a project under CEQA and will undergo CEQA review prior to approval.

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			<p>OSP-3/10037734 OSP Plant-wide Ventilation (HVAC) Upgrades This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>10036398 OSP Condition Improvement Projects - Phase 2 – This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-5 OSP Odor Control Upgrades This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-6 OSP Communication & Safety Monitoring Upgrades This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-7/10037735 Admin Building (OSP 930) Health & Safety Improvements – This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-8 OSP DCS Upgrade (Construction) – This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-9/10037777 OSP & WSPS Security Enhancements This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-11 Gaseous Oxygen System (OSP 011) Upgrades – This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>OSP-12 Grit Removal (OSP 011) Upgrades-Planning This is a project under CEQA and will undergo CEQA review prior to approval.</p>
SSIP	15726	WW Collection System Improvement	<p>CWWSIPCSSR03/10002652 Kansas and Marin Streets Sewer Improvements A Categorical Exemption determination was issued on June 3, 2019 (Case No. 2019-006672ENV).</p> <p>CWWSIPCSSR13/ 10002776 Taraval Sewer Improvements A Categorical Exemption determination was issued on April 14, 2017 (Case No. 2017-004381ENV).</p> <p>CWWSIPCSSR05/10002667 Better Market Street Sewer Improvements The Planning Commission certified the Better Market Street Project Final Environmental Impact Report (EIR) on October 10, 2019 (Case No. 2014.0012E).</p> <p>Large Diameter Sewer Projects consists of numerous sub-projects: 1. Channel Force Main Intertie A Categorical Exemption determination was issued on May 9, 2022 (Case No. 2021-</p>

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			<p>006317ENV).</p> <p>2. New Montgomery, Mission, Jessie, & Minna Streets Brick Sewer Rehabilitation A statutory exemption concurrence was received from Planning on August 6, 2020 (Case Number 2020-006988ENV).</p> <p>3. Panhandle and Inner Sunset Sewer Improvements A Categorical Exemption determination was issued on July 13, 2022 (Case No. 2021-006343ENV).</p> <p>4. Tenderloin and Nob Hill Sewer Project A Statutory Exemption concurrence was received from Planning on March 19, 2021 (Case No. 2021-002879ENV).</p> <p>5. Chinatown and North Beach Large Sewer A Statutory Exemption concurrence was received from Planning on March 8, 2022 (Case No. 2022-002008ENV).</p> <p>6. Castro and Mission Districts Sewer Improvements A Statutory Exemption concurrence was received from Planning on June 29, 2022 (Case No. 2022-005580ENV).</p> <p>7. South Van Ness Ave Sewer Project This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>8. East SOMA Sewer Improvements This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>LDS-6 Geary BRT Sewer Improvements - Phase 2 Construction This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>TS-3 T/S Box Seismic Evaluation This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>TS-4 T/S Box Improvements (Initial Allowance) This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>CSD-1/10037245 Brannan (019) CSD Gate & Baffle Rehab This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>CSD-2/10037244 Baker (009) Baffle Improvements This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>CSD-3/10038468 System-wide CSD & T/S Monitoring Equipment Assessment</p>

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			<p>This is a project under CEQA and will undergo CEQA review prior to approval. CSD-4/10038547 CSD Structure Rehab & Upgrades - Part 1</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. CSD-5 Islais Creek (031A) CSD Rehab & Backflow Prevention</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-1/10037251 Seacliff No. 1 PS & FM Upgrade</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-2/10037246 Seacliff No. 2 PS & FM Upgrade</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-3/10037303 Sunnydale PS Safety Improvements</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-4 Pump Station Security Upgrades</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-5 Geary Underpass PS Safe Access Enhancements</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. PS-8 PS & FM Seismic Evaluation</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. CHFM Inspection and Rehabilitation - Southern Port</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval.</p>
SSIP	15729	WW Stormwater Management	<p>CWWSIPFCDB06/10026810 Yosemite Green Infrastructure A Categorical Exemption determination was issued on August 15, 2017 (Case No 2015-004546ENV)</p> <p>GI-1/10037194 Balboa High School Regional Runoff Reduction Project This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>GI-3/10037195 Regional School/Park: Giannini Middle School This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>GI-6 Ocean Storm Area GI: Aptos School and Playground This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>GI-7 SFPUC Parcel: Merced Manor Reservoir This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>GI-8 Upper Channel Storm Area GI: DMV Runoff Reduction This is a project under CEQA and will undergo CEQA review prior to approval.</p>

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			<p>GI-9 SFPUC Parcel: Sunset Reservoir This is a project under CEQA and will undergo CEQA review prior to approval. CWWSIPFCGI01/10029726 Watershed Stormwater Management (Planning Only) This is a project under CEQA and will undergo CEQA review prior to approval. GI-17 Buchanan Street Mall This is a project under CEQA and will undergo CEQA review prior to approval. GISW01 GI For Stormwater Management (Grant) No disbursement of funds will be made except for feasibility or planning tasks prior to completion of any environmental review necessary for the project(s). CWWSIPFCRP03 Operational Decision System Phase 2 This is not a project under CEQA §15378.</p>
SSIP	15730	WW Flood Resilience-Hydraulic	<p>CWWSIPFCDB12/10026816 Wawona St and 15th Ave Stormwater Detention Project A Categorical Exemption determination was issued on 5/28/2020 (Case No 2020-002636ENV). CWWSIPFCDB14/10026818 Folsom Area Stormwater Improvement Project A Categorical Exemption determination was issued on 9/23/2021 (Case No. 2021-002217ENV). Lower Alemany Area Stormwater Improvement Project This is a project under CEQA and will undergo CEQA review prior to approval. A Categorical Exemption determination was issued for the geotechnical work on 5/24/2022 (Case No. 2022-001873ENV). FR-1 Folsom Area Stormwater Imp. Project Phase 2 This is a project under CEQA and will undergo CEQA review prior to approval. Flood Resiliency Planning This is a project under CEQA and will undergo CEQA review prior to approval Floodwater Management Grant Assistance Program This is a project under CEQA and will undergo CEQA review prior to approval</p>
Capital	15722	WW WWE RNR Collection System	<p>CWWRNRCS Collection System - Sewer Improvements - Small Diameter This is a project under CEQA and will undergo CEQA review prior to approval. CWWRNROI Collection System - Condition Assessment - Small Diameter This is a project under CEQA and will undergo CEQA review prior to approval. Collection System - Condition Assessment - Large Diameter</p>

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Program	Project Number	Project Title	CEQA Compliance
			<p>This is a project under CEQA and will undergo CEQA review prior to approval. Collection System - Condition Assessment - Sewer Laterals</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. Collection System - Sewer Improvements - Large Diameter</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. TS-2 T/S Box Tier 2 (Field) Condition Assessment</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. Sewer Lateral Improvements</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval. Collection System - Sewer Cleaning - Large Diameter</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval.</p>
ThCapital	CWWRNRTF (15724)	WW WWE RNR Treatment Facilities / Treatment Plant Improvements	This is a project under CEQA and will undergo CEQA review prior to approval.
Capital	CWP110 (15707)	WW Treasure Island Capital Imp / Treasure Island New Wastewater Treatment Plant and Recycled Water Facility	The Planning Commission certified the Treasure Island and Yerba Buena Island Redevelopment Plan Final Environmental Impact Report (EIR) on April 21, 2011 (Case No 2007.0903E).
Capital	19139	WW Facilities & Infrastructure	<p>Customer Service System</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval OSP-14 SWOO Condition Assessment & Rehab</p> <p>This is a project under CEQA and will undergo CEQA review prior to approval.</p>
Capital	CWWFAC01 (15714) / 10015554	Ocean Beach Climate Change Adaptation Project	Environmental review is underway (Case No. 2019-020115ENV)
Capital	10033820	Southeast Outfall Condition Assessment and Rehab	This is a project under CEQA and will undergo CEQA review prior to approval.

[SFPUC Wastewater Revenue Bond Issuance - Various Capital Wastewater Projects Benefitting the Wastewater Enterprise - Not to Exceed \$704,198,901]

Ordinance authorizing the issuance and sale of tax-exempt or taxable Wastewater Revenue Bonds and other forms of indebtedness (as described below) by the San Francisco Public Utilities Commission (SFPUC) (“Commission”) in an aggregate principal amount not to exceed \$704,198,901 to finance the costs of various capital wastewater projects benefitting the Wastewater Enterprise pursuant to amendments to the Charter of the City and County of San Francisco enacted by the voters on November 5, 2002, as Proposition E; authorizing the issuance of Wastewater Revenue Refunding Bonds and the retirement of outstanding Wastewater Enterprise Commercial Paper; declaring the Official Intent of the Commission to reimburse itself with one or more issues of tax-exempt bonds or other forms of indebtedness; and ratifying previous actions taken in connection therewith, as defined herein.

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in *strikethrough italics Times New Roman font*.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Findings. The Board of Supervisors (“Board”) of the City hereby finds and declares as follows:

A. On November 5, 2002, the voters of the City and County of San Francisco (“City”) approved Proposition E (“Proposition E”), which among other things, authorized the San Francisco Public Utilities Commission (“Commission”) to issue revenue bonds, including

1 notes, commercial paper or other forms of indebtedness (which forms of indebtedness may
2 include without limitation for purposes of Proposition E, loans and other forms of indebtedness
3 provided by governmental agencies and/or commercial or investment banks), when
4 authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the
5 purpose of reconstructing, replacing, expanding, repairing or improving water facilities or
6 clean water facilities or combinations of water and clean water facilities under the jurisdiction
7 of the Commission; and

8 B. The Commission adopted the Indenture dated as of January 1, 2003, as further
9 amended and supplemented from time to time ("Indenture"), between the Commission and U.
10 S. Bank National Association and in connection therewith, has from time to time issued
11 revenue bonds to finance projects benefitting the Wastewater Enterprise; and

12 C. By Resolution 22-0030 adopted by the Commission on February 8, 2022
13 ("Commission Resolution") the Commission has determined to issue Wastewater Revenue
14 Bonds ("Wastewater Revenue Bonds") and other forms of indebtedness (including without
15 limitation SRF Loans or WIFIA Loans , as described below), as well as interim funding
16 vehicles such as commercial paper, revolving credit notes, bond anticipation notes or other
17 forms of notes, which interim funding vehicles will be issued in advance of being paid off by
18 either Wastewater Revenue Bonds or other forms of indebtedness (including, without
19 limitation and for illustrative purposes only, SRF Loans or WIFIA Loans), to finance the costs
20 of various capital wastewater projects benefitting the Wastewater Enterprise ("Capital
21 Improvement Projects", such projects being more fully described in the Commission
22 Resolution), pursuant to Proposition E, and has formally requested this Board to authorize the
23 issuance and sale of Wastewater Revenue Bonds for such purposes, such Commission
24 Resolution being on file with the Clerk of the Board in File No. 220500; and

25 ///

1 D. Pursuant to Section 43.5 of the San Francisco Administrative Code (“Article V”),
2 enacted by Ordinance No. 203-98 adopted by the Board on June 8, 1998, and signed by the
3 Mayor of the City on June 19, 1998, as amended by Ordinance No. 270-06, adopted on
4 October 24, 2006 by the Board and signed by the Mayor on October 31, 2006, the Board
5 established a procedure pursuant to which the Commission may issue short-term
6 indebtedness, including the issuance of commercial paper in anticipation of the issuance of
7 revenue bonds; and

8 E. The Commission has authorized pursuant to Resolution No. 17-0086, approved
9 by the Commission on April 25, 2017, and the Board has approved pursuant to Resolution No.
10 193-17, adopted by the Board on May 23, 2017, and signed by the Mayor on May 26, 2017, a
11 resolution to increase the Wastewater CP Program to an aggregate principal amount not to
12 exceed \$750 million of commercial paper notes outstanding at any one time, and the
13 Commission has caused from time to time wastewater commercial paper to be issued; and

14 F. In order to finance the costs of the Capital Improvement Projects, the Board now
15 desires to authorize pursuant to Proposition E the issuance and sale of Wastewater Revenue
16 Bonds and other forms of indebtedness for such purposes, including without limitation State
17 Revolving Fund Loans and/or grants from the State Water Resources Control Board (“SRF
18 Loans”) or U.S. Environmental Protection Agency Water Infrastructure Finance and Innovation
19 Act loans (“WIFIA Loans”) and such other indebtedness as may be advantageous to the
20 Commission; and

21 G. The Commission has paid, beginning no earlier than 60 days prior to the
22 adoption of this Ordinance and will pay, on and after the date hereof, certain expenditures
23 (“Expenditures”) in connection with the acquisition, construction and/or equipping of the
24 Capital Improvement Projects; and

25 ///

1 H. This Board is concurrently considering with this Ordinance, related supplemental
2 appropriation ordinances for the fiscal year ending 2023, including the proceeds of such
3 Wastewater Revenue Bonds and other forms of indebtedness (including, without limitation
4 and for illustrative purposes only) SRF Loans, WIFIA Loans, commercial paper, revolving
5 credit notes and bond anticipation notes); and

6 I. In order to finance and refinance the costs of any Wastewater Enterprise
7 facilities or improvements financed with bonds issued pursuant Proposition E, the Board now
8 desires to authorize the issuance and sale of Wastewater Revenue Refunding Bonds.

9 Section 2. Authorization to Issue Wastewater Revenue Bonds and other forms of
10 indebtedness. The Board hereby authorizes the issuance and sale of Wastewater Revenue
11 Bonds in one or more series from time to time by the Commission pursuant to Proposition E
12 and in accordance with the Commission Resolution and the execution and delivery of SRF
13 Loan or WIFIA Loan agreements or the issuance of commercial paper, revolving credit notes,
14 or bond anticipation notes, in an aggregate principal amount not to exceed \$704,198,901
15 (inclusive of financing costs), but exclusive of refunding indebtedness), bearing a maximum
16 rate or rates of interest of not to exceed twelve percent (12%) per annum to finance a portion
17 of the costs of the design, acquisition and construction of the Capital Improvement Projects.
18 Without limiting the foregoing, the Commission shall be authorized to incur SRF Loans from
19 the State Water Resources Control Board or WIFIA Loans from the U.S. Environmental
20 Protection Agency at such time, in such amounts, and upon such other terms and conditions
21 as the Commission may deem advantageous. The Commission is hereby further authorized
22 to determine the timing, amount and manner of sale (i.e., competitive or negotiated) of each
23 series of Wastewater Revenue Bonds, commercial paper, revolving credit notes, or bond
24 anticipation notes pursuant to this authorization; provided however, the Commission's
25 authorization to issue Wastewater Revenue Bonds or incur other forms of indebtedness

1 (including SRF Loans, WIFIA Loans, bond anticipation notes, commercial paper or revolving
2 credit notes) is subject to approval by the Commission of the form of substantially final offering
3 document related to such obligations (if any) and the approval of any related agreements,
4 financing documents and the filing with its Board and the Clerk of the Board any certifications
5 required by Proposition E prior to the issuance of any bonds or the incurrence of any
6 indebtedness herein authorized. The Commission shall also file, within 30 days of any bond
7 sale authorized hereby, with the Clerk of the Board of Supervisors, for inclusion in Board File
8 No. 220500, a report showing the results of the sale of Wastewater Revenue Bonds, SRF
9 Loans or other form of indebtedness including (i) principal amount sold and method of sale, (ii)
10 true interest cost, (iii) final maturity, (iv) the facilities constructed and/or improved, and (v) a
11 statement about the remaining bonding authorization under this Ordinance (“Bond Report”);
12 provided however that failure to file the Bond Report shall not affect the validity of any bonds
13 authorized hereunder.

14 Section 3. Authorization to Issue Wastewater Revenue Refunding Bonds;
15 Commercial Paper Retirement. The Board further authorizes and approves the issuance by
16 the Commission of Wastewater Revenue Refunding Bonds (“Refunding Bonds”) without
17 limitation as to principal amount, in one or more series on one or more dates, at a maximum
18 interest rate or rates of interest not to exceed twelve percent (12%) per annum, provided that
19 each such Refunding Bond issue is permitted under the applicable policies and procedures of
20 the City and authorized by Section 9.109 of the Charter (including related ordinances and
21 resolutions of the Board). The Refunding Bonds may be issued as taxable or tax-exempt
22 obligations, or any combination thereof. Refunding Bonds s authorized hereunder shall be
23 subject to the further following conditions, that: (i) three percent (3%) net present value debt
24 service savings or greater is achieved to ensure ratepayer savings (exclusive of any issuance
25 to refund commercial paper, revolving credit notes, or bond anticipation notes); (ii) that the

1 maturity of the refunded bonds is not extended; (iii) this authorization is subject to a 5-year
2 term through June 30, 2027, at which time this Board may consider an extension; principal
3 payments and term may be adjusted, where permitted under federal and state tax law, only if
4 and when the underlying capital asset funded through said refunded bonds has a useful life
5 not in excess of any limit permitted under federal and state tax law than the refunded term;
6 and (iv) the Commission shall within 30 days of any executed refunding transaction provide a
7 refunding savings report ("Bond Refunding Savings Report") prepared by its financial advisors
8 (that reflects at least a three percent (3%) net present value debt service savings) to the
9 Board, together with a copy of the final Official Statement (if any) with respect to such series
10 of Refunding Bonds, provided that the failure to deliver such Bond Refunding Savings Report
11 shall in no way affect the validity of any Refunding Bonds. Notwithstanding the foregoing, the
12 Commission is authorized to issue Refunding Bonds for non-economic factors, including by
13 way of illustration, eliminating onerous covenants and obsolete provisions contained in the
14 Commission's indenture or other security documents. The Commission shall request a waiver
15 of the savings requirement for any Refunding Bonds issued for non-economic reasons. In
16 furtherance of the purpose of managing the Commission outstanding indebtedness, the
17 General Manager is hereby authorized and directed, in consultation the City Attorney, from
18 Available Wastewater Enterprise Revenues to retire outstanding Wastewater Enterprise
19 Commercial Paper at such times and in such amounts advantageous to the Commission.

20 Section 4. Declaration of Official Intent. The Board, on behalf of the Commission,
21 hereby declares the official intent of the Commission to reimburse the Commission with
22 proceeds of the Wastewater Revenue Bonds or other forms of indebtedness (including SRF
23 Loans or other federal loans, commercial paper, revolving credit notes, or bond anticipation
24 notes) for the Expenditures with respect to the Capital Improvement Projects made on and
25 after a date that is no more than 60 days prior to the adoption of this Ordinance. The

1 Commission reasonably expects on the date hereof that it will reimburse the Expenditures
2 with proceeds of the Wastewater Revenue Bonds or other forms of indebtedness (including,
3 without limitation and for illustrative purposes only, SRF Loans, commercial paper, revolving
4 credit notes or bond anticipation notes). Each said Expenditure was and will be either (A) of a
5 type properly chargeable to a capital account under general federal income tax principles
6 (determined in each case as of the date of the Expenditure), (B) a cost of issuance with
7 respect to such obligations, (C) a nonrecurring item that is not customarily payable from
8 current revenues, or (D) a grant to pay a party that is not related to or an agent of the issuer
9 so long as such grant does not impose any obligation or condition (directly or indirectly) to
10 repay any amount to or for the benefit of the Commission. The Commission will make a
11 reimbursement allocation, which is a written allocation by the Issuer that evidences the
12 Commission's use of proceeds of the Wastewater Revenue Bonds or other forms of
13 indebtedness to reimburse an Expenditure, no later than 18 months after the later of the date
14 on which the Expenditure is paid or the component of the Capital Improvement Projects is
15 placed in service or abandoned, but in no event more than three years after the date on which
16 the Expenditure is paid. The Commission recognizes that exceptions are available for certain
17 "preliminary expenditures," costs of issuance, certain de minimis amounts, expenditures by
18 "small issuers" (based on the year of issuance and not the year of expenditure) and
19 expenditures for construction projects of at least 5 years.

20 Section 5. General Authority. The Controller, Treasurer, the City Attorney and other
21 officers of the City, including the Director of the Office of Public Finance, and their duly
22 authorized deputies and agents are hereby authorized and directed, jointly and severally, to
23 take such actions and to execute and deliver such certificates, agreements, requests or other
24 documents, as they may deem necessary or desirable to facilitate the issuance, sale and
25 delivery of the Wastewater Revenue Bonds, SRF Loans, WIFIA Loans, bond anticipation

1 notes, commercial paper or Refunding Bonds, to obtain bond insurance or other credit or
2 liquidity enhancements with respect to any such obligations, and otherwise to carry out the
3 provisions of this Ordinance. The Commission is hereby directed to provide the final form to
4 the Clerk of the Board of any disclosure document (if any) prepared in connection with the
5 execution of any Wastewater Revenue Bonds, SRF Loans, WIFIA Loans, bond anticipation
6 notes, commercial paper or Refunding Bonds, and the final executed Installment Sale
7 Agreement or other document reflecting the incurrence of an SRF Loan or a WIFIA Loan,
8 within 30 days of the closing of such transactions; provided however that failure to provide
9 such document shall not affect the validity of the obligations authorized hereunder. The
10 Commission is further directed as a part of the two-year budget review to provide to this Board
11 of Supervisors a written report about Wastewater Revenue Bonds authorized hereunder,
12 detailing the total amount authorized, the total amount sold, the remaining authorized but
13 unissued amount, and the bond authorization no longer necessary due to changes in projects
14 and project financing.

15 Section 6. Ratification of Prior Actions. All actions authorized and directed by this
16 Ordinance in connection with the issuance of the Wastewater Revenue Bonds or other forms
17 of indebtedness (including, without limitation and for illustrative purposes only, SRF Loans,
18 WIFIA Loans, bond anticipation notes or commercial paper), Refunding Bonds, and heretofore
19 taken are hereby ratified, approved and confirmed by this Board.

20 Section 7. File Documents. All documents referred to as on file with the Clerk of the
21 Board are in File No. 220500.

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Section 8. Effective Date. Pursuant to Charter Section 8B.124, the remainder of this Ordinance shall take effect thirty (30) days after its adoption.

APPROVED AS TO FORM:
DAVID CHIU, City Attorney

By: /s/ Mark D. Blake
Mark D. Blake
Deputy City Attorney
n:\financ\as2022\1300183\01597857.docx



City and County of San Francisco
Tails
Ordinance

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 220500

Date Passed: June 14, 2022

Ordinance authorizing the issuance and sale of tax-exempt or taxable Wastewater Revenue Bonds and other forms of indebtedness (as described below) by the San Francisco Public Utilities Commission (SFPUC) ("Commission") in an aggregate principal amount not to exceed \$704,198,901 to finance the costs of various capital wastewater projects benefitting the Wastewater Enterprise pursuant to amendments to the Charter of the City and County of San Francisco enacted by the voters on November 5, 2002, as Proposition E; authorizing the issuance of Wastewater Revenue Refunding Bonds and the retirement of outstanding Wastewater Enterprise Commercial Paper; declaring the Official Intent of the Commission to reimburse itself with one or more issues of tax-exempt bonds or other forms of indebtedness; and ratifying previous actions taken in connection therewith, as defined herein.

May 25, 2022 Budget and Appropriations Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

May 25, 2022 Budget and Appropriations Committee - RECOMMENDED AS AMENDED

June 07, 2022 Board of Supervisors - PASSED ON FIRST READING


Ayes: 11 - Chan, Dorsey, Mandelman, Mar, Melgar, Peskin, Preston, Ronen, Safai, Stefani and Walton

June 14, 2022 Board of Supervisors - FINALLY PASSED


Ayes: 10 - Chan, Dorsey, Mandelman, Mar, Melgar, Peskin, Preston, Ronen, Safai and Walton
Excused: 1 - Stefani

File No. 220500


I hereby certify that the foregoing
Ordinance was FINALLY PASSED on
6/14/2022 by the Board of Supervisors of
the City and County of San Francisco.



Angela Calvillo
Clerk of the Board



London N. Breed
Mayor



Date Approved

**Certificate of the Consulting Engineers
in connection with Section 8B.124 of the Charter of the City and County of San Francisco and
the Indenture of the San Francisco Public Utilities Commission (SFPUC)
authorizing the Sale of Wastewater Revenue Bonds and / or Other Forms of Indebtedness, including
Commercial Paper and State and Federal Loans**

This Certificate has been prepared by AECOM Technical Services, Inc., (AECOM), an independent consulting firm, at the request of the San Francisco Public Utilities Commission (SFPUC) in connection with the issuance by the SFPUC of its Wastewater Revenue Bonds and/or other forms of Indebtedness, including Commercial Paper and State and Federal loans.

Proposition E requires certification by an independent consulting engineer that, among other things, “(i) the Projects to be financed with proceeds of bonds under Proposition E, including the prioritization, scheduling and cost estimates thereof, meet generally accepted utility standards.”

Section A below includes projects in the Sewer System Improvement Program (SSIP) and other portions of the Wastewater Enterprise’s capital program, and certifies that (i) the anticipated projects to be financed by the proposed Revenue Bonds and/or Commercial Paper Notes (the “Notes”), or State and Federal loans including the prioritization, cost estimates and scheduling, meet generally accepted utility standards.

The findings and conclusions in this Certificate are based on AECOM’s review of the following Documents, references and data provided by the SFPUC:

- Wastewater Enterprise Capital Improvement Program Quarterly Report – (Q1, FY2021-22), dated January 3, 2022.
- Wastewater Enterprise 2023-2032 10-Year Capital Improvement Plan, January 14, 2022
- Certificate of City and County of San Francisco Planning Department Regarding Proposed Sale of Wastewater Revenue Bonds and Other Forms of Indebtedness in an amount not to Exceed \$704,198,901 for Capital Projects budgeted in Fiscal Years 2022-23, San Francisco Planning Department, August 2, 2022.
- Wastewater Enterprise Revenue Bonds and Other Forms of Indebtedness – FY 2022-23 Capital Improvement Projects (Exhibit A, as included with the Environmental Planning Certification dated July 2022).
- Discussions with SFPUC staff.

1. Based upon its review of the Documents, and in reliance on the information presented in the Documents, references and data, and in reliance upon conversations and representations of SFPUC staff, the undersigned certifies that the Projects, including prioritization, cost estimates, and scheduling, meet generally accepted utility standards.

2. The Documents contain information about the current status of the Projects, estimated completion dates and cost of completion of some of the Projects.
While developing the Certificate, AECOM reviewed the Documents and consulted with SFPUC staff. This Certification is based on the information provided by the SFPUC. The conclusions and observations contained herein constitute only the opinions of AECOM. The various background documents, statements, and other information supplied by the SFPUC, its employees, and other consultants have

been relied upon as being accurate in the performance of these analyses; however, no assurances are given nor warranties implied by AECOM as to the accuracy of such information. AECOM makes no certification and gives no assurances except as explicitly set forth in this document.

SECTION A: CERTIFICATION OF SSIP AND OTHER PORTIONS OF THE WASTEWATER CIP

AECOM’s review of the Documents for Section A included a “programmatic approach” such that AECOM certifies that the revenue bonds and/or commercial paper proceeds or state or federal loans are intended to be used by the SFPUC to fund the capital projects included in the Wastewater Enterprise’s SSIP and other portions of the Wastewater Enterprise’s capital program. Projects may be moved on or off the CIP list, modified, delayed or accelerated as necessary due to scheduling, budgeting, or other constraints.

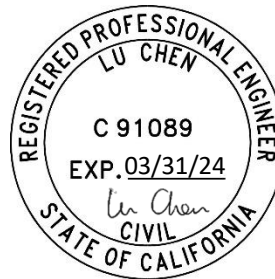
Based upon our review of the Documents provided by the SFPUC, and in reliance upon conversations and representations of SFPUC staff, AECOM certifies that the projects, as listed in Schedule I, to be financed by the revenue bonds and/or commercial paper program, as identified in the Wastewater Enterprise’s SSIP and other portions of the Wastewater Enterprise’s capital program including the prioritization, cost estimates and scheduling, meet generally accepted utility standards.

Dated this 26th day of September, 2022

AECOM Technical Services, Inc.

By: Lu Chen

Lu Chen, P. E.
Civil Engineer



Attachment A

Exhibit A Wastewater Enterprise Revenue Bonds and Other Forms of Indebtedness - FY 2022-23 Capital Improvement Projects, July 2022

SCHEDULE I

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
SSIP	10015807 (CWWSIPSE02)	Southeast Plant Improvements	SEP-7; New Trades and Maintenance Buildings – This is a project under CEQA and will undergo CEQA review prior to approval.	Condition assessment has been completed for southeast plant, including SEP 850, in 2013.
SSIP	15726	WW Collection System Improvement	<p>Large Diameter Sewer Projects consists of numerous sub-projects:</p> <ol style="list-style-type: none"> 1. Channel Force Main Intertie A Categorical Exemption determination was issued on May 9, 2022 (Case No. 2021-006317ENV). 2. New Montgomery, Mission, Jessie, & Minna Streets Brick Sewer Rehabilitation A statutory exemption concurrence was received from Planning on August 6, 2020 (Case Number 2020-006988ENV). 3. Panhandle and Inner Sunset Sewer Improvements A Categorical Exemption determination was issued on July 13, 2022 (Case No. 2021-006343ENV). 4. Tenderloin and Nob Hill Sewer Project A Statutory Exemption concurrence was received from Planning on March 19, 2021 (Case No. 2021-002879ENV). 5. Chinatown and North Beach Large Sewer A Statutory Exemption concurrence was received from Planning on March 8, 2022 (Case No. 2022-002008ENV). 6. Castro and Mission Districts Sewer Improvements A Statutory Exemption concurrence was received from Planning on June 29, 2022 (Case No. 2022-005580ENV). 	

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
SSIP	15729	WW Stormwater Management	<p>7. South Van Ness Ave Sewer Project This is a project under CEQA and will undergo CEQA review prior to approval.</p> <p>8. East SOMA Sewer Improvements This is a project under CEQA and will undergo CEQA review prior to approval.</p>	Sub-project 7 uses a rehabilitation and replacement (R&R) approach instead of a conceptual engineering report procedure.
			<p>GI-17 Buchanan Street Mall This is a project under CEQA and will undergo CEQA review prior to approval.</p>	The existing site runoff has been studied as required by GI guidelines. More planning phase work is budgeted.
			<p>GISW01 GI For Stormwater Management (Grant) No disbursement of funds will be made except for feasibility or planning tasks prior to completion of any environmental review necessary for the project(s).</p>	The application and project will be evaluated and considered for funding based on the GI Guidelines
			<p>CWWSIPFCRP03 Operational Decision System Phase 2 This is not a project under CEQA §15378.</p>	Planning has been completed in phase 1 of this project
SSIP	15730	WW Flood Resilience - Hydraulic	<p>Floodwater Management Grant Assistance Program This is a project under CEQA and will undergo CEQA review prior to approval</p>	This is a grant program. Project eligibility and other program procedures are documented in the Commission approved Grant Program requirements and terms.
Capital	15722	WW WVE RNR Collection System	<p>Collection System - Sewer Cleaning - Large Diameter This is a project under CEQA and will undergo CEQA review prior to approval.</p>	Planning has been completed outside of this project

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
SSIP	10015807 (CWWSIPSE02)	Southeast Plant Improvements	SEP-6; Secondary Clarifiers (SEP 230) Rehabilitation – This is a project under CEQA and will undergo CEQA review prior to approval.	Condition assessment has been completed for southeast plant, including SEP 230, in 2013.
			SEP-10; Aeration Tanks (SEP 200) Rehab-Condition Assess & Planning This is a project under CEQA and will undergo CEQA review prior to approval.	Condition assessment has been completed for southeast plant, including SEP 230, in 2013.
Capital	15722	WW WVE RNR Collection System	CWWRNRCS Collection System - Sewer Improvements - Small Diameter This is a project under CEQA and will undergo CEQA review prior to approval.	Planning and prioritization for R&R small diameter sewers are based on planning using CSAMP, or other city department led projects
			Sewer Lateral Improvements This is a project under CEQA and will undergo CEQA review prior to approval.	Improvements will be based on separate sewer laterals condition assessment project.
Capital	CWWRNRTF (15724)	WW WVE RNR Treatment Facilities / Treatment Plant Improvements	This is a project under CEQA and will undergo CEQA review prior to approval.	Planning has been completed outside of this project
Sewer System Improvement Program (SSIP)	15733	WW SSIP Program-Wide Management	The individual projects are projects under CEQA and will undergo CEQA review prior to approval.	CIP datasheet shows this project provides programmatic support to overall SSIP projects in order for them to meet the endorsed SSIP Level-of-Service (LOS) goals by providing full compliance with State and Federal regulatory requirements applicable to the treatment and disposal of sewage

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
				and stormwater, and Wastewater Enterprise (WWE) goal
SSIP	10015796 (CWWSIPDP)	WW SSIP Biosolids-Digester Facilities Project	The Planning Commission certified the Biosolids Digester Facilities Project Final Environmental Impact Report (EIR) on March 8, 2018 (Case No. 2015-000644ENV).	Project initiation date is on 12/13/2014; CER and design have been completed
SSIP	10015807 (CWWSIPSE02)	WW Treatment Plant Improvement – Southeast Plant-New Headworks (Grit) Replacement	The Final MND was issued on December 19, 2016 (Case No. 2015-006224ENV). An Addendum was issued on March 7, 2019.	Project initiation date is on 03/01/2013; CER and design have been completed
SSIP	10015807 (CWWSIPSE02)	Southeast Plant Improvements	SEP-2; SEP, Booster PS, & BFS Security Enhancements – This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/18/2022; CER is due on 10/12/22
			SEP-8; SEP Condition Improvement Projects - Part 1 – This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/12/2021; Planning phase has been done
SSIP	15736	WW Treatment Plant Improvement – North Point Facility (NPF) Improvements	10026822 North Shore Wet Weather Pump Station Imp. And Disinfection – A Categorical Exemption determination was issued on October 13, 2017 (Case No. 2017-010521 ENV).	Project initiation date is on 08/15/2013; CER has been completed in 2015
			NPF-1; Sedimentation (NPF 040/041) Tanks Condition Improvements – This is a project under CEQA and will undergo CEQA review prior to approval.	Condition Assessment has been done in 2013
SSIP	15756	Oceanside Treatment Plant (OSP)	OSP-2/10037734 Solids Thickening (Oceanside Plant (OSP 011)) Process Upgrade This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 07/06/2021; CER has been completed

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
			10036398 OSP Condition Improvement Projects - Phase 2 – This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/04/2021; CER is due on 01/03/25
			OSP-7/10037735 Admin Building (OSP 930) Health & Safety Improvements – This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/04/2021; CER and design done;
			OSP-8 OSP DCS Upgrade (Construction) – This is a project under CEQA and will undergo CEQA review prior to approval.	Planning is conducted on Enterprise-wide basis
			OSP-11 Gaseous Oxygen System (OSP 011) Upgrades – This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/03/2021; CER has been done
SSIP	15726	WW Collection System Improvement	CWWSIPCSSR03/10002652 Kansas and Marin Streets Sewer Improvements A Categorical Exemption determination was issued on June 3, 2019 (Case No. 2019-006672ENV).	Project initiation date is on 06/10/2013; New AAR has been initiated
			CWWSIPCSSR13/ 10002776 Taraval Sewer Improvements A Categorical Exemption determination was issued on April 14, 2017 (Case No.2017-004381ENV).	Project initiation date is on 03/14/2016; CER has been done
SSIP	15726	WW Collection System Improvement	LDS-6 Geary BRT Sewer Improvements - Phase 2 Construction This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 03/15/2018; CER is due at Q2FY23
			CSD-3/10038468 System-wide CSD & T/S Monitoring Equipment Assessment This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/18/2022; This system-wide assessment will evaluate the

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
				equipment current condition, location, and reliability
			CSD-4/10038547 CSD Structure Rehab & Upgrades - Part 1 This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation is on 01/03/2022; Condition assessment has been scheduled
			PS-5 Geary Underpass PS Safe Access Enhancements This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 09/01/2021; Planning phase has been scheduled
SSIP	15729	WW Stormwater Management	CWWSIPFCDB06/10026810 Yosemite Green Infrastructure A Categorical Exemption determination was issued on August 15, 2017 (Case No 2015-004546ENV)	Project initiation date is on 12/03/2012; CER has been done
			GI-1/10037194 Balboa High School Regional Runoff Reduction Project This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/01/2021; Planning phase has been done
			GI-3/10037195 Regional School/Park: Giannini Middle School This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/01/2021; Planning phase has been done
SSIP	15730	WW Flood Resilience- Hydraulic	CWWSIPFCDB14/10026818 Folsom Area Stormwater Improvement Project A Categorical Exemption determination was issued on 9/23/2021 (Case No. 2021-002217ENV).	Project initiation date is on 07/01/2016; CER has been done
			Lower Alemany Area Stormwater Improvement Project This is a project under CEQA and will undergo CEQA review prior to approval. A Categorical Exemption determination was issued for the geotechnical work on 5/24/2022 (Case No. 2022-001873ENV).	Project initiation date is on 01/02/2019; Planning phase has been done

Program	Project No. (from Planning Certificate Exhibit A)	Project Title (from Planning Certificate Exhibit A)	CEQA Compliance (from Planning Certificate Exhibit A)	Notes/References
			FR-1 Folsom Area Stormwater Imp. Project Phase 2 This is a project under CEQA and will undergo CEQA review prior to approval.	Project initiation date is on 01/03/2022; Planning phase has been scheduled
			Flood Resiliency Planning This is a project under CEQA and will undergo CEQA review prior to approval	NAR has been completed
Capital	CWP110 (15707)	WW Treasure Island Capital Imp / Treasure Island New Wastewater Treatment Plant and Recycled Water Facility	The Planning Commission certified the Treasure Island and Yerba Buena Island Redevelopment Plan Final Environmental Impact Report (EIR) on April 21, 2011 (Case No 2007.0903E).	Project initiation date is on 01/01/2011; Planning phase has been done
Capital	15722	WW WVE RNR Collection System	CWWRNROI Collection System - Condition Assessment - Small Diameter This is a project under CEQA and will undergo CEQA review prior to approval.	This is a condition assessment project
			Collection System - Condition Assessment - Large Diameter This is a project under CEQA and will undergo CEQA review prior to approval.	This is a condition assessment project
			Collection System - Condition Assessment - Sewer Laterals This is a project under CEQA and will undergo CEQA review prior to approval.	This is a condition assessment project



San Francisco
Water
Power
Sewer



Wastewater Financial Projections

August 10, 2022



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

2625 Alcatraz Avenue, #602
Berkeley, CA 94705
Tel 510 653 3399
www.bartlewells.com

TO: San Francisco Public Utilities Commission

DATE: August 10, 2022

ATTN: Edward Kwong, Senior Administrative Analyst

FROM: Alex Handlers & Douglas Dove, P.E.

RE: Wastewater Financial Projections for Proposition E Compliance

Background

Bartle Wells Associates (BWA) was retained by the San Francisco Public Utilities Commission (SFPUC) to develop financial projections in support of San Francisco Charter Article VIII B, Section 8B.124, as established by Proposition E which was approved by the voters of the City and County of San Francisco on November 5, 2002. This section of the Charter a) authorizes the SFPUC to issue revenue bonds and other forms of indebtedness and b) authorizes the Board of Supervisors to take actions necessary for the issuance and repayment of such debt subject to various conditions including *“that 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.”*

Financial Projections

BWA developed financial projections based on data provided by the SFPUC as well as a number of independent calculations and assumptions which constitute such examination or investigation as is necessary to enable BWA to express an informed opinion as to whether the requirements of Proposition E have been satisfied. Based on the projections, the Wastewater Enterprise will generate net revenues (as defined per the Indenture securing the SFPUC’s outstanding Wastewater Revenue Bonds) that are at least 1.25 times Annual Debt Service in each fiscal year from Fiscal Years 2022-23 through 2031-32. In accordance with the requirements of Proposition E, BWA certifies that 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 projected bonds to be issued, and estimated repair and replacement costs.

Attached Tables

The attached tables include:

- **Table 1 - SFPUC Wastewater Cash Flow Projections** – This table was developed by Bartle Wells Associates based on information provided by the SFPUC and a number of independent assumptions, and includes projections of future fund balances, revenues, operating and maintenance expenses, debt service, other non-operating expenses, net revenues, and debt service coverage.
- **Table 2 - Cash Flow Assumptions** – This table describes assumptions used in developing the financial projections.
- **Table 3 - 10-Year Capital Improvement Program & Funding Sources** – This table shows projected SFPUC power capital improvements and anticipated sources of funding.
- **Table 4 - Estimated Debt Service** – This tables estimates annual debt service on future bonds per each \$100 million of project funding.
- **Table 5 - Projected Bond Issues** – This table shows projected debt issued by fiscal year and calculates annual debt service for each bond issue.
- **Table 6 - Projected Debt Service on Future Financings** – This table projects debt service by fiscal year for each water debt issue and shows a schedule of projected debt payments.
- **Table 7 - Outstanding Debt** – This table shows debt service due on outstanding debt issues.

The tables are based on information provided by the SFPUC as well as a number of independent calculations and assumptions. BWA takes no responsibility for the accuracy of information provided by the SFPUC, nor for any errors or omissions in information provided.

Submitted by: BARTLE WELLS ASSOCIATES



Alex Handlers
Principal/Vice President



Douglas R. Dove, P.E.
President



SFPUC Wastewater Enterprise Financial Projections

List of Tables

Table 1 - SFPUC Wastewater Cash Flow Projections

Table 2 - Cash Flow Assumptions

Table 3 - 10-Year Capital Improvement Program & Funding Sources

Table 4 - Estimated Debt Service

Table 5 - Projected Bond Issues

Table 6 - Projected Debt Service on Future Financings

Table 7 - Outstanding Debt

Table 1 - SFPUC Wastewater Cash Flow Projections

Years 1 - 5

	2022/23	2023/24	2024/25	2025/26	2026/27
ASSUMPTIONS					
Projected Rate Increases	0.0%	9.0%	9.0%	8.0%	9.0%
Drought Surcharges (Net)	4.76%	4.76%	0.0%	0.0%	0.0%
Change in Retail Sales Volume	2.3%	2.9%	1.5%	2.2%	-0.3%
Change in Wholesale Sales Volume	7.6%	8.1%	1.4%	2.2%	-0.4%
Interest Earnings Rate	-	0.75%	1.0%	1.0%	1.0%
O&M Cost Escalator	-	-	3.0%	3.0%	3.0%
Beginning Fund Reserves (Unappropriated)	121,269,000	101,592,000	103,763,000	78,954,000	76,372,000
REVENUES					
Retail Volumetric Service Charges	329,306,000	369,505,000	408,838,000	451,471,000	490,383,000
Retail Drought Surcharges	15,675,000	17,588,000	0	0	0
Retail Fixed Service Charges	10,842,000	11,818,000	12,882,000	13,913,000	15,165,000
Wholesale Sewer Service Charges	11,434,000	12,813,000	14,168,000	15,636,000	16,973,000
Interest Income	606,000	762,000	1,038,000	790,000	764,000
BABs Bond Subsidy	3,471,000	3,356,000	3,235,000	3,105,000	2,968,000
Rental Revenues	722,000	742,000	761,000	780,000	800,000
Other Revenues	1,825,000	1,879,000	1,926,000	1,974,000	2,023,000
Programmatic Revenues	4,166,000	4,344,000	4,453,000	4,564,000	4,678,000
Capacity Fees/Other Non-Debt Revs	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000
Total	383,742,000	428,502,000	452,996,000	497,928,000	539,449,000
EXPENSES					
<u>Operating & Maintenance</u>					
Salaries & Benefits	84,661,000	87,311,000	89,930,000	92,628,000	95,407,000
Other Non-Personnel	27,003,000	27,971,000	28,810,000	29,674,000	30,564,000
Materials/Supplies/Equipment	14,412,000	15,442,000	15,905,000	16,382,000	16,873,000
Services of SFPUC Bureaus	34,800,000	36,039,000	37,120,000	38,234,000	39,381,000
Services of Other Depts	33,392,000	34,100,000	35,123,000	36,177,000	37,262,000
Other Operating Expenses	250,000	250,000	250,000	250,000	250,000
Programmatic Projects (Net of Lease)	4,229,000	4,269,000	4,269,000	4,269,000	4,269,000
Adjustments	0	0	0	0	0
Subtotal	198,747,000	205,382,000	211,407,000	217,614,000	224,006,000
<u>Debt Service (Net of Cap I)</u>					
Outstanding Bonds	96,841,000	99,346,000	110,842,000	112,443,000	112,339,000
Outstanding SRF Loans	5,798,000	6,180,000	10,524,000	10,955,000	16,210,000
Outstanding WIFIA Loans	0	0	0	0	0
Projected Bonds (Net of Cap I)	0	0	0	11,728,000	40,386,000
Subtotal	102,639,000	105,526,000	121,366,000	135,126,000	168,935,000
<u>Non-Operating</u>					
Pay-Go Capital Funding	88,700,000	98,743,000	128,352,000	130,806,000	133,308,000
525GG Lease	2,427,000	2,417,000	2,417,000	2,417,000	2,396,000
Proposed BANs - Interest Only (Subord)	10,906,000	14,263,000	14,263,000	14,547,000	14,997,000
Subtotal	102,033,000	115,423,000	145,032,000	147,770,000	150,701,000
Total Expenses	403,419,000	426,331,000	477,805,000	500,510,000	543,642,000
Revenues Less Expenses	(19,677,000)	2,171,000	(24,809,000)	(2,582,000)	(4,193,000)
Ending Fund Reserves	101,592,000	103,763,000	78,954,000	76,372,000	72,179,000
Annual Revenues	383,742,000	428,502,000	452,996,000	497,928,000	539,449,000
Less Revs Excluded from Coverage	(3,901,000)	(4,076,000)	(4,237,000)	(4,413,000)	(4,571,000)
Operating & Maintenance Expenses	(198,747,000)	(205,382,000)	(211,407,000)	(217,614,000)	(224,006,000)
Net Revenues (Current Basis)	181,094,000	219,044,000	237,352,000	275,901,000	310,872,000
Net Revs + Beginning Fund Reserves	302,363,000	320,636,000	341,115,000	354,855,000	387,244,000
Debt Service Coverage, Current Basis	1.76	2.08	1.96	2.04	1.84
Debt Service Coverage, Indenture Basis	2.95	3.04	2.81	2.63	2.29

Table 1 - SFPUC Wastewater Cash Flow Projections

Years 6 - 10

	2027/28	2028/29	2029/30	2030/31	2031/32
ASSUMPTIONS					
Projected Rate Increases	8.0%	8.0%	6.0%	4.0%	5.0%
Drought Surcharges	0.0%	0.0%	0.0%	0.0%	0.0%
Change in Retail Sales Volume	0.2%	-0.9%	-0.1%	-0.1%	0.4%
Change in Wholesale Sales Volume	0.1%	-1.0%	-0.2%	-0.2%	0.4%
Interest Earnings Rate	1.0%	1.0%	1.0%	1.0%	1.0%
O&M Cost Escalator	3.0%	3.0%	3.0%	3.0%	3.0%
Beginning Fund Reserves	72,179,000	80,267,000	83,896,000	94,729,000	102,344,000
Retail Volumetric Service Charges	530,665,000	567,996,000	601,182,000	624,302,000	658,141,000
Retail Drought Surcharges	0	0	0	0	0
Retail Fixed Service Charges	16,378,000	17,688,000	18,749,000	19,499,000	20,474,000
Wholesale Sewer Service Charges	18,356,000	19,635,000	20,774,000	21,564,000	22,724,000
Interest Income	722,000	803,000	839,000	947,000	1,023,000
BABs Bond Subsidy	2,822,000	2,668,000	2,506,000	2,335,000	2,153,000
Rental Revenues	820,000	841,000	862,000	884,000	906,000
Other Revenues	2,074,000	2,126,000	2,179,000	2,233,000	2,289,000
Programmatic Revenues	4,795,000	4,915,000	5,038,000	5,164,000	5,293,000
Capacity Fees/Other Non-Debt Revs	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000
Subtotal	582,327,000	622,367,000	657,824,000	682,623,000	718,698,000
EXPENSES					
<u>Operating & Maintenance</u>					
Salaries & Benefits	98,269,000	101,217,000	104,254,000	107,382,000	110,603,000
Other Non-Personnel	31,481,000	32,425,000	33,398,000	34,400,000	35,432,000
Materials/Supplies/Equipment	17,379,000	17,900,000	18,437,000	18,990,000	19,560,000
Services of SFPUC Bureaus	40,562,000	41,779,000	43,032,000	44,323,000	45,653,000
Services of Other Depts	28,569,000	29,258,000	29,968,000	30,700,000	31,452,000
Other Operating Expenses	250,000	250,000	250,000	250,000	250,000
Programmatic Projects (Net of Lease)	4,269,000	4,269,000	4,269,000	4,307,000	4,347,000
Adjustments	0	0	0	0	0
Subtotal	220,779,000	227,098,000	233,608,000	240,352,000	247,297,000
<u>Debt Service (Net of Cap I)</u>					
Outstanding Bonds	112,183,000	112,019,000	111,845,000	111,665,000	111,470,000
Outstanding SRF Loans	16,210,000	16,210,000	16,210,000	16,210,000	16,210,000
Outstanding WIFIA Loans	10,287,000	10,287,000	10,287,000	10,287,000	14,066,000
Projected Bonds (Net of Cap I)	70,121,000	105,884,000	125,167,000	143,935,000	171,002,000
Subtotal	208,801,000	244,400,000	263,509,000	282,097,000	312,748,000
<u>Non-Operating</u>					
Pay-Go Capital Funding	135,860,000	138,463,000	141,119,000	143,827,000	146,590,000
525GG Lease	2,376,000	2,354,000	2,332,000	2,309,000	2,284,000
Proposed BANs - Interest Only	6,423,000	6,423,000	6,423,000	6,423,000	0
Subtotal	144,659,000	147,240,000	149,874,000	152,559,000	148,874,000
Total Expenses	574,239,000	618,738,000	646,991,000	675,008,000	708,919,000
Revenues Less Expenses	8,088,000	3,629,000	10,833,000	7,615,000	9,779,000
Ending Fund Reserves	80,267,000	83,896,000	94,729,000	102,344,000	112,123,000
Annual Revenues	582,327,000	622,367,000	657,824,000	682,623,000	718,698,000
Less Revs Excluded from Coverage	(4,734,000)	(4,883,000)	(5,012,000)	(5,094,000)	(5,224,000)
Operating & Maintenance Expenses	(220,779,000)	(227,098,000)	(233,608,000)	(240,352,000)	(247,297,000)
Net Revenues (Current Basis)	356,814,000	390,386,000	419,204,000	437,177,000	466,177,000
Net Revs + Beginning Fund Reserves	428,993,000	470,653,000	503,100,000	531,906,000	568,521,000
Debt Service Coverage, Current Basis	1.71	1.60	1.59	1.55	1.49
Debt Service Coverage, Indenture Basis	2.05	1.93	1.91	1.89	1.82

Table 2
SFPUC Wastewater Financial Projections
Cash Flow Assumptions

SFPUC Model Basis	Financial projections are based on SFPUC's <i>Wastewater 10 Year Plan</i> dated June 17, 2022.
Projected Rate Increases	Future rate increases are based on SFPUC projections.
Beginning Fund Reserves	Beginning fund reserves based on SFPUC estimates.
Sewer Service Charges	Sewer Service Charge are based on SFPUC estimates for 2022/23 with BWA projections for future years accounting for SFPUC-projected rate increases and SFPUC projections of changes in retail and wholesale sales volumes.
Interest Income	Interest earnings starting 2023/24 are estimated based on beginning fund reserves for each year multiplied by interest rates projected at 0.75% in 2023/24 and 1.0% thereafter.
BABs Bond Subsidy	Based on BWA projections assuming a 35% federal interest reimbursement offset by 5.7% sequestration.
Rental, Other & Programmatic Capacity Fees/Other Non-Debt	Based on SFPUC projections for 2 years, then escalate at the annual rate of 2.5%.
Outstanding Debt Service	Outstanding debt service is based on debt service schedules for each issue, as provided by SFPUC, and is shown on a fiscal year basis.
Debt Service Assumptions & Projected Debt Service	Debt assumptions are shown on Table 4, which calculates debt service per \$100 million of project funding. Future debt service projections are based on SFPUC projections of annual financing requirements and BWA projections of debt service as shown on Table 5, with a schedule of projected debt service by fiscal year shown on Table 6.
Capital Projects	Capital Project expenses and sources of funding are based on SFPUC projections.
Other Non-Operating Expenses	Based on SFPUC projections.
Net Revenues	Pursuant to the Indenture, Net Revenues are defined as Annual Revenues -- excluding revenues identified as ineligible in the SFPUC model and interest earnings on any bond funds, but including fund reserves available to pay debt service assuming the Commission determined such reserves should be "Revenues" under the Indenture -- less Operation and Maintenance Expenses.
Debt Service Coverage, Current Basis	Coverage based on annual Net Revenues (excluding available fund reserves) divided by Annual Debt Service.
Debt Service Coverage, Indenture Basis	Coverage based on annual Net Revenues plus Beginning Fund Reserves (as allowed per Indenture) divided by Annual Debt Service.

SFPUC Wastewater Projected Revenues & Expenses

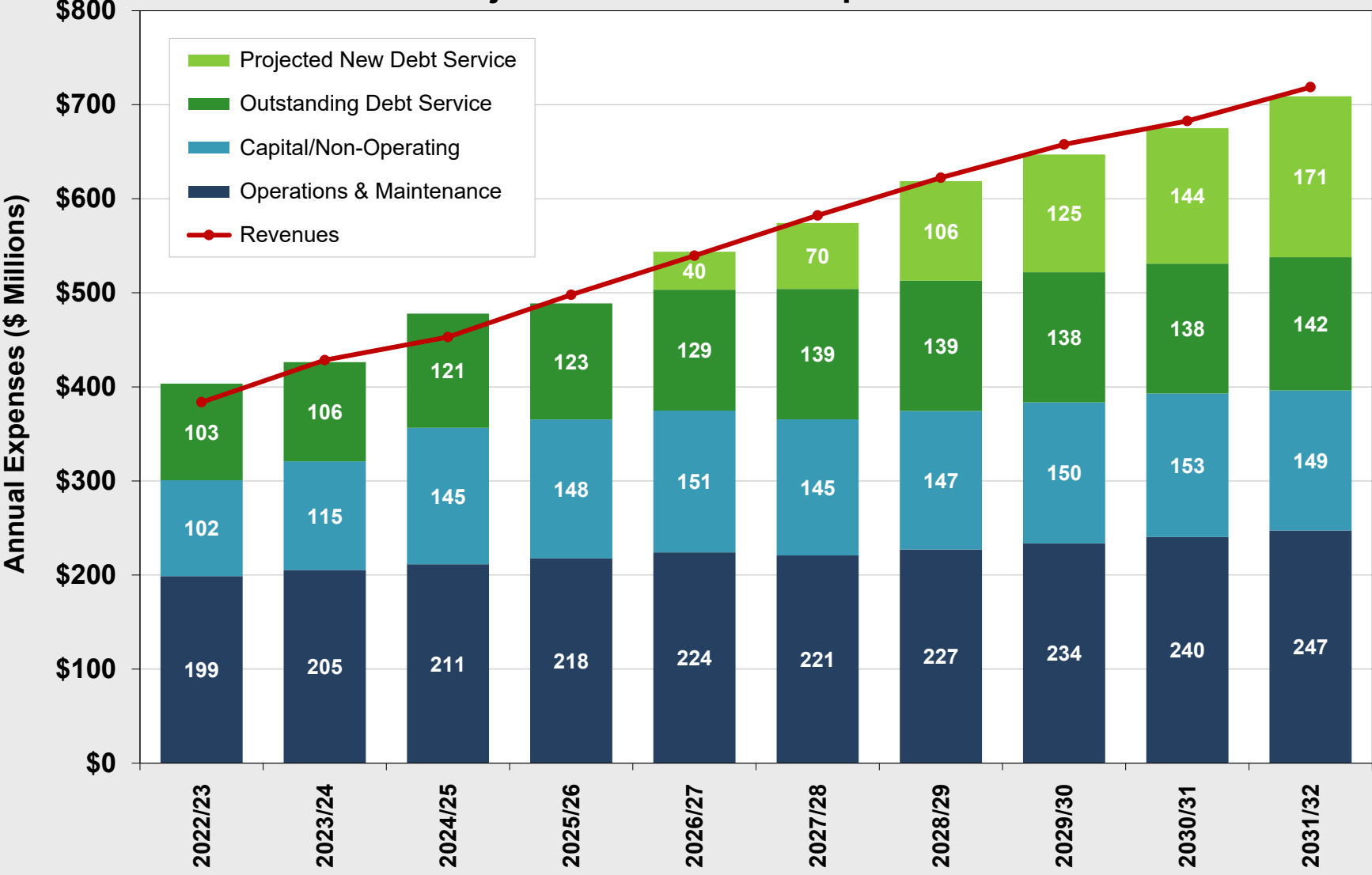


Table 3
SFPUC Wastewater Enterprise
10-Year Capital Improvement Program & Funding Sources
Includes Construction Cost Inflation

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
CAPITAL IMPROVEMENT PROGRAM COSTS										
Sewer System Improvement Program (SSIP)										
Program-Wide Management	14,000,000	14,000,000	15,000,000	15,000,000	15,000,000	14,260,000	14,000,000	14,000,000	14,000,000	14,000,000
Treatment Facilities	447,604,000	503,368,000	482,782,000	405,397,000	136,882,000	96,583,000	32,022,000	54,499,000	17,198,000	20,342,000
Sewer/Collection System	58,255,000	89,566,000	50,705,000	29,848,000	43,436,000	9,421,000	54,334,000	5,989,000	8,615,000	36,334,000
Stormwater Mgmt/Flood Control	63,265,000	96,318,000	137,823,000	197,210,000	127,019,000	63,037,000	12,470,000	15,731,000	45,981,000	64,446,000
Subtotal SSIP	583,124,000	703,252,000	686,310,000	647,455,000	322,337,000	183,301,000	112,826,000	90,219,000	85,794,000	135,122,000
Non-SSIP Improvements										
Repairs & Replacements	103,036,000	145,097,000	210,073,000	235,924,000	237,207,000	239,878,000	253,268,000	255,913,000	267,096,000	287,347,000
Treasure Island Improvements	215,000	65,666,000	66,929,000	0	0	0	0	0	0	0
Facilities & Infrastructure	0	37,700,000	48,609,000	48,266,000	21,123,000	31,982,000	7,907,000	5,885,000	104,000	100,000
Subtotal Non-SSIP	103,251,000	248,463,000	325,611,000	284,190,000	258,330,000	271,860,000	261,175,000	261,798,000	267,200,000	287,447,000
Total	686,375,000	951,715,000	1,011,921,000	931,645,000	580,667,000	455,161,000	374,001,000	352,017,000	352,994,000	422,569,000
FUNDING SOURCES										
New Debt Funding	597,676,000	658,284,000	681,896,000	618,050,000	345,250,000	246,422,000	181,777,000	162,761,000	161,425,000	212,987,000
Annual Revenues	83,005,000	93,048,000	122,657,000	125,111,000	127,613,000	130,165,000	132,768,000	135,424,000	138,132,000	140,895,000
Capacity Fees/Other	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000	5,695,000
Total	686,376,000	757,027,000	810,248,000	748,856,000	478,558,000	382,282,000	320,240,000	303,880,000	305,252,000	359,577,000
SURPLUS / (SHORTFALL)	1,000	(194,688,000)	(201,673,000)	(182,789,000)	(102,109,000)	(72,879,000)	(53,761,000)	(48,137,000)	(47,742,000)	(62,992,000)

Note: Amounts shown reflect capital improvements projected to be budgeted, but not necessarily funded or financed, each year.

Table 4
 SFPUC Wastewater Enterprise
 Estimated Debt Service
 Per \$100 Million of Project Funding

	Bonds 30 Years 3.75%	Bonds 30 Years 4.00%	Bonds 30 Years 4.50%
	Year 1	Years 2 - 4	Years 5 - 10
Funding Target	Per each \$100,000,000	Per each \$100,000,000	Per each \$100,000,000
Assumed Issuance & Payment Months			
Issuance Date	Mar-1	Mar-1	Mar-1
Payment: Semi-Annual Interest	Apr-1	Apr-1	Apr-1
Payment: Semi-Annual Interest + Principal	Oct-1	Oct-1	Oct-1
Total Debt Issue	\$111,100,000	\$111,880,000	\$113,460,000
Project Funding	\$100,000,000	\$100,000,000	\$100,000,000
Issuance Costs & Reserve Requirement			
Underwriter Discount	0.30%	\$333,000	\$336,000
Issuance Costs	Est.	300,000	300,000
Reserve Requirement		0	0
Capitalized Interest (Months)	30	10,415,000	11,188,000
Accrued Interest During Construction		n/a	n/a
Rounding/Contingency		<u>52,000</u>	<u>56,000</u>
Total		11,100,000	13,460,000
Financing Terms			
Term (Years)	30	30	30
Interest Only (Years)	2.5	2.5	2.5
Principal Amortization (Years)	28	28	28
Est. Average Interest Rate	3.75%	4.00%	4.50%
Debt Service			
Interest Only Period (Annual Amount)	4,166,000	4,475,000	5,106,000
Principal Amortization Period	6,544,000	6,781,000	7,274,000
<i>Financing costs and interest rates estimated for financial planning purposes.</i>			

Table 5
SFPUC Wastewater Enterprise
Projected Bond Issues

Debt Issuance	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
Financing Terms	Bonds	Bonds	Bonds	Bonds	Bonds	Bonds	Bonds	Bonds	Bonds	Bonds
CIP Project Funding Target	482,600,000	362,302,000	568,137,000	462,355,000	0	630,115,000	0	0	0	607,500,000
Total Issue Size	536,170,000	402,520,000	635,630,000	517,280,000	0	714,930,000	0	0	0	689,270,000
Issuance Date	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1	Mar-1
Issuance Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Interest Payments	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1	Apr-1 & Oct-1
Principal Payments (Year 3+)	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1	Oct-1
Average Interest Rate	3.75%	3.75%	4.00%	4.00%	4.00%	4.50%	4.50%	4.50%	4.50%	4.50%
Repayment Term (Years)	30	30	30	30	30	30	30	30	30	30
Capitalized Interest (Years)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Debt Service per \$100M										
Interest Only Period (Annual)	4,166,000	4,166,000	4,475,000	4,475,000	4,475,000	5,106,000	5,106,000	5,106,000	5,106,000	5,106,000
Principal Amort Period	6,544,000	6,544,000	6,781,000	6,781,000	6,781,000	7,274,000	7,274,000	7,274,000	7,274,000	7,274,000
Annual Debt Service										
Interest Only Period	20,105,000	15,094,000	25,424,000	20,690,000	0	32,174,000	0	0	0	31,019,000
Principal Amort Period	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000
Cumulative MADS	31,581,000	55,290,000	93,815,000	125,167,000	125,167,000	171,002,000	171,002,000	171,002,000	171,002,000	215,192,000

Table 6
 SFPUC Wastewater Enterprise
 Projected Debt Service on Future Financings

Fiscal Year Ending June 30	2022/23 Bonds	2023/24 Bonds	2024/25 Bonds	2025/26 Bonds	2026/27 Bonds	2027/28 Bonds	2028/29 Bonds	2029/30 Bonds	2030/31 Bonds	2031/32 Bonds	Total Net of Cap I
2024											0
2025											0
2026	11,728,000										11,728,000
2027	31,581,000	8,805,000									40,386,000
2028	31,581,000	23,709,000	14,831,000								70,121,000
2029	31,581,000	23,709,000	38,525,000	12,069,000							105,884,000
2030	31,581,000	23,709,000	38,525,000	31,352,000	0						125,167,000
2031	31,581,000	23,709,000	38,525,000	31,352,000	0	18,768,000					143,935,000
2032	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0				171,002,000
2033	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0			171,002,000
2034	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0		171,002,000
2035	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	18,094,000	189,096,000
2036	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2037	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2038	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2039	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2040	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2041	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2042	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2043	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2044	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2045	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2046	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2047	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2048	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2049	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2050	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2051	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2052	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2053	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2054	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2055	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2056	31,581,000	23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	215,192,000
2057		23,709,000	38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	183,611,000
2058			38,525,000	31,352,000	0	45,835,000	0	0	0	44,190,000	159,902,000
2059				31,352,000	0	45,835,000	0	0	0	44,190,000	121,377,000
2060					0	45,835,000	0	0	0	44,190,000	90,025,000
2061						45,835,000	0	0	0	44,190,000	90,025,000
2062							0	0	0	44,190,000	44,190,000
2063								0	0	44,190,000	44,190,000
2064									0	44,190,000	44,190,000
2065										44,190,000	44,190,000

Note: First fiscal year debt payment of each bond issue assumes 7 months of interest-only payments.

Table 7
SFPUC Wastewater Enterprise
Outstanding Debt

Fiscal Year Ending June 30	2010B Bonds (BABS)			2013A Bonds	2013B Bonds	2016A Bonds	2016B Bonds	2018A Bonds	2018B Bonds	2018C Bonds	2021A Bonds	2021B Bonds	Total Senior Bonds (Gross)	SRF Loans	WIFIA Loans	Total Senior Debt (Gross)
	Gross	Int Reimbs	Net													
	Seq: 5.70% 33.005%															
2023	17,796,166	3,470,860	21,267,026	13,495,800	14,428,000	10,645,750	3,001,050	18,265,975	15,401,000	3,806,831	0	0	96,840,572	5,797,739	0	102,638,311
2024	17,673,662	3,356,167	21,029,829	664,175	23,042,125	15,983,875	4,507,425	17,339,100	14,649,250	5,486,316	0	0	99,345,927	6,179,695	0	105,525,622
2025	17,545,666	3,234,710	20,780,375	672,600	23,034,250	15,988,000	4,508,175	16,415,600	13,895,625	7,165,800	10,000,638	1,615,574	110,841,927	10,524,175	0	121,366,103
2026	17,408,913	3,105,412	20,514,325	1,285,200	22,424,000	16,017,900	4,513,450	16,413,225	13,897,000	7,165,800	11,465,700	1,852,250	112,443,438	10,955,349	0	123,398,787
2027	17,261,893	2,967,774	20,229,667		23,707,875	16,047,675	4,524,475	16,413,600	13,899,250	7,165,800	11,465,700	1,852,250	112,338,518	16,209,919	0	128,548,437
2028	17,110,033	2,821,938	19,931,971		23,708,125	16,046,300	4,522,475	16,415,725	13,896,750	7,165,800	11,465,700	1,852,250	112,183,158	16,209,919	10,286,558	138,679,635
2029	16,943,973	2,668,115	19,612,088		23,709,625	16,048,175	4,520,850	16,413,725	13,898,750	7,165,800	11,465,700	1,852,250	112,018,848	16,209,919	10,286,558	138,515,325
2030	16,772,303	2,505,840	19,278,143		23,706,000	16,047,425	4,524,225	16,411,725	13,899,375	7,165,800	11,465,700	1,852,250	111,844,803	16,209,919	10,286,558	138,341,280
2031	16,593,293	2,334,540	18,927,833		23,705,750	16,048,175	4,522,350	16,413,600	13,897,875	7,165,800	11,465,700	1,852,250	111,664,793	16,209,919	10,286,558	138,161,270
2032	16,397,827	2,152,859	18,550,686		23,707,125	16,044,550	4,524,975	16,413,225	13,898,375	7,165,800	11,465,700	1,852,250	111,469,827	16,209,919	14,066,273	141,746,018
2033	16,194,233	1,961,894	18,156,127		23,708,375	16,045,550	4,521,850	16,414,475	13,895,000	7,165,800	11,465,700	1,852,250	111,263,233	16,209,919	17,845,988	145,319,140
2034	15,983,646	1,763,670	17,747,316		23,711,700	16,045,050	4,522,725	16,411,225	13,901,625	7,165,800	11,465,700	1,852,250	111,059,721	16,209,919	17,845,988	145,115,627
2035	15,765,202	1,557,903	17,323,104		23,712,500	16,046,925	4,522,225	16,412,225	13,897,250	7,165,800	11,465,700	1,852,250	110,840,077	16,209,919	17,845,988	144,895,983
2036	15,542,896	1,344,259	16,887,155		23,707,700	16,045,050	4,524,975	16,411,100	13,900,875	7,165,800	11,465,700	1,852,250	110,616,346	16,209,919	17,845,988	144,672,252
2037	15,306,552	1,121,032	16,427,584		23,706,300	16,048,175	4,525,600	16,411,475	13,901,250	7,165,800	11,465,700	1,852,250	110,383,102	16,209,919	17,845,988	144,439,009
2038	15,055,150	887,884	15,943,033		23,712,000	16,046,300	4,524,700	16,411,850	13,897,375	7,165,800	11,465,700	1,852,250	110,131,125	16,209,919	17,845,988	144,187,031
2039	14,801,539	645,756	15,447,294		23,703,800	16,048,300	4,523,400	16,410,725	13,898,000	7,165,800	11,465,700	1,852,250	109,869,514	16,209,919	17,845,988	143,925,420
2040	14,534,555	394,263	14,928,818		23,705,600	16,047,000	4,522,000	16,437,000	13,872,375	7,165,800	11,465,700	1,852,250	109,602,280	16,209,919	17,845,988	143,658,186
2041	14,258,181	133,070	14,391,250		23,706,000	16,046,700	4,525,200	16,499,200	13,810,750	7,165,800	11,465,700	1,852,250	109,329,781	16,209,919	17,845,988	143,385,687
2042					37,820,700	16,046,600	4,522,800	16,565,600	13,742,875	7,165,800	11,465,700	1,852,250	109,182,325	16,209,919	17,845,988	143,238,232
2043					37,821,600	16,045,900	4,524,600	16,635,000	13,677,500	7,165,800	11,465,700	1,852,250	109,188,350	16,209,919	17,845,988	143,244,257
2044						16,048,700	4,525,300	11,673,900	9,537,625	16,265,100	34,773,075	5,108,750	97,932,450	16,209,919	35,507,670	149,650,039
2045						16,044,200	4,524,700			37,478,200	34,772,200	5,112,375	97,931,675	16,209,919	44,552,740	158,694,334
2046						16,046,500	4,522,600			37,480,200	34,773,450	5,112,125	97,934,875	16,209,919	53,770,968	167,915,762
2047						16,044,600	4,523,700			37,475,100	34,773,575	5,112,625	97,929,600	16,209,919	54,168,008	168,307,527
2048										37,475,800	34,773,200	5,108,500	77,357,500	16,209,919	54,499,393	148,066,812
2049										37,479,900	34,772,500	5,109,250	77,361,650	13,806,400	65,226,754	156,394,804
2050											34,773,400	5,109,250	39,882,650	12,070,488	84,382,123	136,335,261
2051											34,773,900	5,112,875	39,886,775	12,070,489	87,199,855	139,157,119
2052											34,776,900	5,109,625	39,886,525	0	89,896,448	129,782,973
2053															90,990,302	90,990,302
2054															92,050,880	92,050,880
2055															93,113,188	93,113,188
2056															94,109,303	94,109,303
2057															95,177,060	95,177,060
2058															96,178,111	96,178,111
2059															97,320,203	97,320,203
2060															98,496,906	
2061															67,429,196	
2062															35,521,200	

Note: Excludes junior lien 2009 COPs.