PUBLIC UTILITIES REVENUE BOND OVERSIGHT COMMITTEE c/o San Francisco Public Utilities Commission 525 Golden Gate Avenue, 2nd floor, San Francisco, CA 94102 Telephone (415) 554-5184 Email: RBOC@sfgov.org

April 29, 2019

The Honorable London Breed, Mayor City and County of San Francisco City Hall, Room 200 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102

Dear Mayor Breed:

On behalf of my fellow Committee members, I am pleased to present you with the 2018 Annual Report of the Public Utilities Revenue Bond Oversight Committee.

The Revenue Bond Oversight Committee (RBOC) was established in November 2003 pursuant to Proposition P, which was approved by the San Francisco voters during the November 2002 election. The attached report of the Committee describes our activities during 2018.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Travis George, Chair Public Utilities Revenue Bond Oversight Committee

Angela Calvillo, Clerk of the Board of Supervisors
Members, San Francisco Board of Supervisors
Ben Rosenfield, Controller
Nicole Sandkulla, General Manager, Bay Area Water Supply & Conservation Agency

San Francisco Public Utilities Revenue Bond Oversight Committee

Annual Report 2018

525 Golden Gate Avenue 4th Floor San Francisco, CA 94102 p. (415) 554-5184 f. (415) 554-5163 rboc@sfgov.org http://www.sfwater.org/rboc In November 2003, the Public Utilities Revenue Bond Oversight Committee (RBOC) was formed after passage of Proposition P (November 2002), adding Sections 5A.30 through 5A.36 to the San Francisco Administrative Code.

The RBOC facilitates transparency and accountability in the expenditure of revenue bond proceeds. The public is invited and welcome to attend RBOC meetings and provide input.

Pursuant to Administrative Code, Section 5A.36, the RBOC is charged with providing independent oversight of the expenditure of public utility revenue bond proceeds for capital improvements. The committee helps ensure an uninterrupted supply of water, power, and wastewater treatment services to the City and County and San Francisco Public Utilities Commission (SFPUC) customers. Further, it helps ensure public dollars are spent in accordance with the authorizing bond resolutions and applicable laws.

After conducting an independent audit, and consulting with the City Attorney, the RBOC may determine that proceeds of a revenue bond program were not utilized for purposes authorized in accordance with the associated bond resolution or applicable law. It may be further determined that this surmounts to an illegal expenditure or waste of such revenue bonds. By majority vote, the RBOC may prohibit the issuance or sale of authorized revenue bonds that have yet to be issued or sold.

Any RBOC decision to prohibit the sale of authorized but unsold revenue bonds may be appealed to the Board of Supervisors. The SFPUC can provide evidence of corrective measures to the Board, and the Board may decide to overturn the decision by the RBOC, upon a two-thirds vote of all of its members. To date, the RBOC has not prevented any issuance of SFPUC revenue bonds.

The SFPUC continues to incur bonded indebtedness to finance capital improvements related to its two major enterprises, the Water and Sewer systems. Each of these enterprises have embarked on major system improvement programs, which are expected to be completed in 2021 and beyond, respectively. However, the provisions of Proposition P were set to expire on January 1, 2013, unless extended by an ordinance of the Board of Supervisors.

In 2012, the Board extended the sunset date to January 1, 2016, (see Ordinance No. 236-12, BOS File No. 120221). Accordingly, in 2015, the SFPUC submitted, and the Board of Supervisors approved, a resolution supporting the extension of the RBOC until January 1, 2019. On December 11, 2018, the Board of Supervisors approved Ordinance No. 309-18, BOS File No. 180123, extending the RBOC through January 1, 2025.

The Revenue Bond Oversight Committee (RBOC) monitors the expenditure of revenue bond proceeds related to the repair, replacement, upgrade and expansion of the SFPUC's water, power and sewer infrastructure. The RBOC provides independent oversight to ensure transparency and accountability. The RBOC's goal is to ensure that SFPUC revenue bond proceeds are spent for their intended purposes in accordance with legislative authorization and other applicable laws.

Future Activities

Activities and topics the RBOC expects to cover in 2019 include the following:

- Work with the SFPUC staff to increase transparency and certification of compliance with bond expenditure policies.
- Initiate expenditure audits in coordination with city staff.
- Monitor completion of the Water System Improvement Program (WSIP), including the Calaveras Dam Replacement Project, and other major Water Enterprise capital projects, including Mountain Tunnel.
- Review the SFPUC's work, both planned and completed, towards the Sewer System Improvement Program (SSIP).
- Ensure the continuity of oversight through member succession planning and work with the Board of Supervisors to extend the RBOC charter.
- Improve outreach to ensure greater public awareness and input related to the SFPUC's expenditure of revenue bond proceeds.

During 2018, RBOC achievement highlights include the following:

- Strategized with SFPUC and other city staff to prepare for audit process.
- Worked with SFPUC staff to modify and finalize CFO annual certification.
- Created a new fund management policy to guide the committee in its use and management of fund balances.
- Heard presentation from SFPUC regarding the effects of changes to the federal tax policy and the loss of ability to advance refund bonds.
- Monitored the outcome of bond sales and ongoing debt plans.
- Heard presentation from SFPUC regarding current state of Clean Power SF and the possibilities for the program's future expansion.
- Toured Bioregional Habitat Restoration projects.
- Reviewed progress of WSIP and SSIP with particular focus on the accuracy of budgeting and scheduling forecasts and continued attention to ensuring that lessons learned from the WSIP are applied during implementation of the SSIP.
- Worked with city attorney to extend the sunset date of the RBOC.
- Heard presentations from SFPUC staff on results of Wastewater bond sales and updates on the WIFIA loan transaction.
- Heard from SFPUC staff about financial impact of disasters on capital plan and update on CleanPowerSF.

Membership

The RBOC is comprised of seven members:

- Two seats appointed by the Mayor
- Two seats appointed by the Board of Supervisors
- One seat appointed by the City Controller
- One seat appointed by the Bay Area Water User's Association (BAWUA), under the auspices of the Bay Area Water Supply and Conservation Agency (BAWSCA), and
- One seat occupied by the Budget and Legislative Analyst or his/her representative.

At a minimum, the members appointed by the Mayor and the Board shall, individually or collectively, have expertise, skills and experience in economics, the environment, construction, and project management.

The member appointed by the Controller shall have background and experience in auditing, accounting, and project finance.

Biographies of current RBOC members is included below. Please see Appendix 1 for information on past members who served during 2018.

Member Biographies



Kevin Cheng Appointed by the Mayor

Former principal management consultant developing and executing strategy and operation work for major Fortune 500 corporations, with particular expertise in project management. Current managing partner of a San Francisco-based development company.

Holly Kaufman (Resigned on 3/8/18) Appointed by the Mayor



CEO of a strategic advisory firm, designing and managing initiatives that integrate environmental and economic needs. Clients include the White House Council on Environmental Quality, Hewlett Packard, the California Wind Energy Association, the Union of Concerned Scientists and the Natural Resources Defense Council. Served in the Clinton administration as a United Nations climate change treaty negotiator representing the Departments of State and Defense. Speaks and publishes widely on climate change, green business, clean tech, sustainability and ecological protection issues. Vice-Chair of SF Board of Supervisors' Energy Efficiency Coordinating Committee.

Christina Tang (Vice-Chair) Appointed by BAWSCA



Finance Manager for the Bay Area Water Supply and Conservation Agency (BAWSCA) representing its 26 members' collective interests in their relationship with the SFPUC on matters related to water supply, facility reliability, operations, water quality and wholesale water rates. Christina has over 14 years of experience in public finance, including direct experience in debt management. Christina received her Master of Science degree in Finance from the University of Houston, and her Master of Public Administration from the University of Illinois at Springfield. Christina is a certified Public Finance Officer designated by GFOA.



Travis George (Chair) Appointed by the Controller

Having served in multiple roles for the East Bay Municipal Utility District, Travis has a background in both utilities and municipal finance. Before his current role, Travis worked at Moody's Investors Service where he served five years as a credit rating analyst. During his time with Moody's he rated a wide range of municipal issuers including many water, wastewater and electric utilities. Travis also previously served as an analyst for both Con Edison in New York City and Bonneville Power Administration in Portland, OR. Travis holds a bachelor's degree in Economics from Portland State University and a master's degree in Public Administration and Policy from New York University.



Jennifer Millman (Resigned 01/25/19)

Appointed by the Budget and Legislative Analyst's Office. As Senior Analyst for the San Francisco Board of Supervisors Budget & Legislative Analyst's Office, Jennifer conducts legislative and policy analysis, budget review, and performance audits. Jennifer previously worked for an environmental planning firm, where she managed the environmental review for a variety of development projects throughout California. Jennifer holds a B.S. in Environmental Economics & Policy from UC Berkeley, and an M.P.P. from the Goldman School of Public Policy at UC Berkeley.

Ashley Clark (Appointed 01/25/19)

Appointed by the Budget and Legislative Analyst's Office (succeeding Jennifer Millman). As an Analyst for the San Francisco Board of Supervisors Budget & Legislative Analyst's Office, Ashley conducts legislative and policy analysis, budget review, and performance audits. Ashley previously worked for the Asia Foundation on their Governance and Law Unit, and for the Government of Timor-Leste as a Fulbright Public Policy Fellow. Ashley holds a B.A. in Political Science from Middlebury College, and an MPP/MA-IAS from the Goldman School of Public Policy at UC Berkeley.

Robert Leshner (Resigned 01/28/19)

Appointed by Board of Supervisors

President of Compound Labs, a software laboratory focused on bridging blockchain technology and banking institutions.

Previously, Robert led the merchant division of Postmates, after founding two venture backed technology companies. Before that, Robert was a founding employee of HPM Partners, a financial advisor with \$8bn of assets under management, where he was a member of the Investment Committee and led interest rate and fixed income analysis. Prior, he managed risk, liquidity, and issuance planning for \$60bn of funding at Discover Bank. Robert holds a B.A. in Economics from the University of Pennsylvania and is a Chartered Financial Analyst.





Tim Cronin Appointed by Board of Supervisors

Tim Cronin is an attorney in the San Francisco office of Wilson Sonsini Goodrich & Rosati, where he advises clients on issues relating to the development, financing, and regulation of energy and infrastructure projects, with a focus on community solar and community choice aggregation.

Tim holds a bachelor's degree in Law & Society from American University and a law degree from U.C. Berkeley. Before attending law school, Tim worked at the American Council On Renewable Energy (ACORE) in Washington, DC, where he promoted international partnerships among government actors, renewable energy companies, and financiers as the organization's manager of international programs.

2018 Meeting Schedule

The RBOC held 11 meetings in 2018. Please see Appendix 2 for a summary of agenda topics.

Full agendas and minutes for each meeting are available at:

http://www.sfwater.org/rboc

2018 Account Summary

Pursuant to Proposition P, the RBOC receives 1/20th of 1% of gross revenue bond proceeds to fund the cost of retaining the services of "outside auditors, inspectors and necessary experts to perform independent reviews.

As of December 31, 2018, RBOC had an account balance of \$2,189,807 with actual expenditures to-date (including encumbrances) of \$1,083,783. A complete accounting of RBOC funds can be found in Appendix 3.

Bond Expenditure Certification

As part of its mission, the RBOC asks staff to affirm that all bond proceeds are spent "appropriately and according to authorization and applicable laws."

Please see Appendix 4 for the "Bond Expenditure Certification" and Appendix 5 for the 2018 "Debt Overview."

Regularly scheduled meetings of the RBOC meet monthly on the following dates at 9:00 A.M. at the SFPUC Building located at 525 Golden Gate Avenue, in San Francisco, unless otherwise specified.

Meeting agendas of the RBOC will be posted on <u>http://www.sfwater.org</u> and at the SF Main Library, 5th Floor.

The public is invited to attend RBOC meetings and provide input.

- January 28, 2019
- February 19, 2019
- March 15, 2019
- April 15, 2019
- May 20, 2019
- June 17, 2019
- July 15, 2019
- August 19, 2019
- September 16, 2019
- October 21, 2019
- November 18, 2019
- December 16, 2019

Acknowledgements

The RBOC would like to express its appreciation to the SFPUC staff and others for facilitating the tasks of the committee. Specifically, the committee would like to acknowledge the following staff:

Public Utilities Commission - General Manager Harlan Kelly, CFO Eric Sandler, Deputy CFO Charles Perl, Water Enterprise Assistant General Manager Steven Ritchie, Director, Water Capital Projects and Programs Dan Wade, Acting SSIP Director Howard Fung, former SSIP Director Karen Kubick, Sheena Johnson, Richard Morales, Mike Brown, Frank McParland, Yolanda Manzone, Lenore Koutney, Kristina Cordero, and Erin Franks.

City Attorney's Office - Deputy City Attorney Mark Blake.

Controller's Office - Audit Director Tonia Lediju, Winnie Woo, Nicole Kelly, and Melissa Ng.

From the Board of Supervisors, the RBOC wishes to thank Victor Young, Assistant Clerk, for his technical and administrative support.

Additionally, the committee would like to thank Carmen Clark, strategic planning consultant.

Appendix 1. RBOC Members 2018

Member	Appointment and Terms	Qualifications			
Kevin ChengMayor Appointee Appointed on 5/19/10 Term expired on 11/12/13 (Hold Over Status)		Former management consultant developing and executing strategy and operation work for major Fortune 500 corporations, with particular expertise in project management. Current managing partner of San Francisco based development company.			
Holly Kaufman Co-Chair	Mayor Appointee Appointed on 2/15/12 Term expired on 11/12/15 Resigned 03/08/18	CEO of a strategic advisory firm that designs and manages initiatives that integrate environmental and economic needs. Clients include the White House Council on Environmental Quality, Hewlett Packard, the California Wind Energy Association, the Union of Concerned Scientists and the Natural Resources Defense Council. Served in the Clinton Administration as a United Nations climate change treaty negotiator representing the Departments of State and Defense. Speaks and publishes widely on climate change, green business, clean tech, sustainability, and ecological protection issues. Vice-Chair of SF Board of Supervisors' Energy Efficiency Coordinating Committee.			
Christina Tang Vice Chair	Bay Area Water Users Association Appointee Appointed on 7/1/2014 Term expired on 7/1/2018. Reappointed on February 6, 2019.	Finance Manager for the Bay Area Water Supply and Conservation Agency (BAWSCA) representing its 26 members' collective interests in their relationship with the SFPUC on matters related to water supply, facility reliability, operations, water quality and wholesale water rates. Christina has almost fourteen years of experience in financial operations with City and County governments and special district governmental entities, including debt issuance and debt management. Christina received her Master of Science degree in Finance from the University of Houston, and her Master of Public Administration from the University of Illinois at Springfield.			
Travis George Controller Appointee Appointed on 1/20/2017 Term expires on 11/12/2019 Co-Chair Co-Chair		Debt Administrator for the East Bay Municipal Utility District, Travis has a background in both utilities and municipal finance. Before his current role, Travis worked at Moody's Investors Service where he served five years as a credit rating analyst. During his time with Moody's he rated a wide range of municipal issuers including many water, wastewater and electric utilities. Travis also previously served as an analyst for both Con Edison in New York City and Bonneville Power Administration in Portland, OR. Travis holds a bachelor's degree in Economics from Portland State University and a master's degree in Public Administration and Policy from New York University.			

Jennifer Millman (succeeding Jadie Wasilco)	Budget Analyst Appointee Appointed on March 28, 2017 Resigned January 25, 2019	Jennifer Millman is a Senior Analyst for the San Francisco Board of Supervisors Budget & Legislative Analyst's Office, Jennifer conducts legislative and policy analysis, budget review, and performance audits. Jennifer previously worked for an environmental planning firm, where she managed the environmental review for a variety of development projects throughout California. Jennifer holds a B.S. in Environmental Economics & Policy from UC Berkeley, and an M.P.P. from the Goldman School of Public Policy at UC Berkeley.
Ashley Clark (succeeding Jennifer Millman)	Budget Analyst Appointee Appointed on January 25, 2019	Ashley Clark is an Analyst for the San Francisco Board of Supervisors Budget & Legislative Analyst's Office, Ashley conducts legislative and policy analysis, budget review, and performance audits. Ashley previously worked for the Asia Foundation on their Governance and Law Unit, and for the Government of Timor-Leste as a Fulbright Public Policy Fellow. Ashley holds a B.A. in Political Science from Middlebury College, and an MPP/MA-IAS from the Goldman School of Public Policy at UC Berkeley.
Robert Leshner Co-Chair	Board of Supervisors Appointed Appointed on 11/3/2016 Term expires on 11/12/2019 Resigned January 27, 2019	Robert Leshner leads the merchant division of Postmates, a technology and logistics company, after founding two venture backed technology companies. Before that, Robert was a founding employee of HPM Partners, a financial advisor with \$8bn of assets under management, where he was a member of the Investment Committee and led interest rate and fixed income analysis. Prior, he managed risk, liquidity, and issuance planning for \$60bn of funding at Discover Bank. Robert holds a B.A. in Economics from the University of Pennsylvania and is a Chartered Financial Analyst.

Tim Cronin	Board of Supervisors Appointee Appointed on 12/3/2016 Term expires on 11/12/2020	Tim Cronin is an attorney in the San Francisco office of Wilson Sonsini Goodrich & Rosati, where he advises clients on issues relating to the financing, development, and regulation of energy and infrastructure projects. Tim has represented developers and investors in financings involving large distributed and utility-scale renewable energy project portfolios. In addition, he provides counsel to energy and infrastructure companies with respect to customer agreements and federal, state, and local regulations as such companies seek to enter new markets and offer new distributed energy services to residential and commercial customers. Before attending law school at U.C. Berkeley, Tim worked at the American Council On Renewable Energy (ACORE) in Washington, DC, where he promoted international partnerships among government actors, renewable energy companies, and financiers as the organization's manager of international programs.
------------	---	--

Appendix 2: 2018 Meeting Summary

The RBOC held 11 meetings in 2018. Listed below is a summary of agenda topics. Full agendas and minutes for each meeting are available at: http://www.sfwater.org/rboc

February 26, 2018

- 1. SFPUC Capital Financing Update
- RBOC Self-Assessment of the 2017 goals/accomplishments and setting goals for 2018
- 3. RBOC Succession Planning

March 19, 2018

- 1. RBOC review of potential meeting topics
- 2. RBOC Audit priorities and planning
- 3. RBOC Review of SFPUC Annual Certification
- 4. RBOC Succession and Charter Sunset Planning
- 5. RBOC Fund Management Policy

April 23, 2018

- 1. SFPUC Water System Improvement Project (WSIP), Calaveras Dam and Budget increase Update
- 2. SFPUC Water Bond Sales Update
- 3. RBOC Succession and Charter Sunset Planning

May 21, 2018

- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update
- 2. SFPUC Re-baselining and Sewer System Improvement Project Update
- 3. SFPUC Improving community outreach and transparency

June 25, 2018

- 1. SFPUC Capital Plan and Debt Financing Impact Update
- 2. SFPUC Water System Improvement Program Quarterly Update
- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update

July 24, 2018

1. Off-site visit of SFPUC Bioregional Habitat Restoration Sites

August 13, 2018

- 1. SFPUC Results of Wastewater Bond Sales and WIFIA Loan Transactions Update
- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update

September 18, 2018

- 1. SFPUC Water System Improvement Program Financing Expenses Update
- 2. SFPUC Financial impact of disasters on capital plan Update
- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update

October 15, 2018

- 1. SFPUC Sewer System Improvement Program Quarterly Update
- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update

November 26, 2018

- 1. SFPUC Water System Improvement Program and Mountain Tunnel Quarterly Update
- 2. SFPUC Outstanding Bond Update
- RBOC: Review of RBOC audit topics, previous RBOC Request for Quote, process/procedures for hiring an auditor, and review of the possibility of obtaining a third-party contract administrator Water System Improvement Project (WSIP) update

December 17, 2018

- 1. SFPUC Clean Power SF Update
- 2. RBOC: Discussion regarding obtaining the services of the City Services Auditor to administer future outside auditing contracts

Appendix 3: Budget Summary

RBOC Account Summary

December 2018

	<u>Series</u>	Water	Wastewater	Power	Total
	2006 A Bonds	263,462	-	-	263,462
	2008 CREBS	-	-	3,163	3,163
	2009 A Bonds	212,390	-	-	212,390
	2009 B Bonds	217,209	-	_	217,209
	2010 A Bonds	31,425	27,121		58,547
				-	
	2010 B Bonds	208,860	96,258	-	305,118
	2010 D Bonds	41,629	-	-	41,629
	2010 E Bonds	172,995	-	-	172,995
	2010 F Bonds	93,085	-	-	93,085
	2010 G Bonds	177,501	-	-	177,501
	2011 A Bonds	316,504	-	-	316,504
	2011 B Bonds	15,240	-	-	15,240
	2011 C Bonds	17,698	-		17,698
	2011 QECBS	-	-	4,146	4,14
	2012 NCREBs	-	-	3,300	3,300
	2012A Bonds	316,351	-	-	316,35
	2012B Bonds	8,433	-	-	8,433
	2013B Bonds	-	183,555	-	183,55
	2015A Bonds	-	-	17,979	17,979
	2015B Bonds	-	-	4,227	4,22
	2015 NCREBS	-	-	2,050	2,05
	2016A Bonds	-	140,691	-	140,69
	2016B Bonds	-	39,662	-	39,66
	2016C Bonds	129,580	-	-	129,58
	2017A Bonds	70,451	-	-	70,45
	2017B Bonds	85,953	-	-	85,95
	2017C Bonds	41,122	-	-	41,122
	2018A Bonds	-	131,757	-	131,75
	2018B Bonds	-	110,222	-	110,22
	2018C Bonds	-	89,573	-	89,573
	Subtotal Sources	2,419,888	818,838	34,864	3,273,590
	Charges Against Budget (\$)				
	Actual Charges				
	WSIP Expenditures & CP (2006)	59,370	-	-	59,370
	Financial Review of WSIP (2007)	92,050	-	-	92,05
	WSIP Sunset Reservoir (2009)	71,890	-	-	71,89
	CSA Controller's Audit (2011/2012)	86,219	29,750	-	115,96
	Independent Review Panel (IRP) (2011/2012)	116,010	-	-	116,01
	LADWP for Independent Review Panel (2011/2012)	11,489	-	-	11,48
	IBBS Consulting for Independent Review Panel (2011/2012)	47,000	-	-	47,00
	CSA Audit - Final Bill Q3 12	29,625	-	-	29,62
	RW Block WSIP Evaluation - (invoice for Nov 12 - Aug 14)	531,926	-	-	531,92
	Facilitation Meeting for RBOC Strategic Planning Meeting 2015	970	970	970	2,91
	Facilitation Meeting for RBOC Strategic Planning Meeting 2016	1,078	1,078	1,078	3,23
	Facilitation Meeting for RBOC Strategic Planning Meeting 2017	770	770	770	2,30
	Subtotal Charges	1,048,398	32,568	2,818	1,083,78
в	Available Funds Before Pending Charges	1,371,490	786,270	32,046	2,189,80
	Pending Charges				
	r chang charges		-	-	
	Subtotal Pending Charges	-	-	-	-

1,371,490 786,270 32,046 A - B - C Available Funds After Pending Charges

Note: Funding Sources restated in 2018 to reflect gross proceeds

2,189,807

Appendix 4: Bond Expenditure Certificate from SFPUC

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER, ASSISTANT GENERAL MANAGER FOR BUSINESS SERVICES FOR THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION TO THE REVENUE BOND OVERSIGHT COMMITTEE

I, Eric Sandler, the duly authorized and acting Chief Financial Officer, Assistant General Manager for Business Services of the San Francisco Public Utilities Commission ("SFPUC"), hereby certify to the Public Utilities Revenue Bond Oversight Committee ("RBOC") that I have reviewed such documents as I reasonably have deemed necessary for purposes of this certification, including:

1. The Financial Statements of the SFPUC, dated as of January 25, 2019, including the opinion letter of KPMG dated as of January 25, 2019;

2. The WSIP Quarterly Reports of the SFPUC related to the Water Enterprises;

3. The SSIP Quarterly Reports of the SFPUC related to the Wastewater Enterprise

Based upon a review of such documents, together with such other information that I reasonably have deemed necessary for purposes of providing this certification, I hereby advise you that no facts have come to my attention, after due inquiry, that cause me, exercising the judgment reasonably expected of my office and position, to believe that proceeds of any bond issue of the SFPUC have been wasted, not used for their authorized purposes or otherwise used illegally. For purposes of this certification, I have not undertaken to audit or to cause to be audited any outstanding bond issue of the SFPUC, and only undertake to report to the RBOC the results of the review described above, in my role as Chief Financial Officer, Assistant General Manager for Business Services of the SFPUC.

This certification is delivered to you this 3rd day of April 2019.

PUBLIC UTILITIES COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO

Eric Sandler Chief Financial Officer

Assistant General Manager/ Business Services

Appendix 5: Debt Overview: 2018

(as of January 1, 2019)						
	Water	Wastewater	Power			
Outstanding Debt						
Revenue Bonds	\$4.44B	\$1.51B	\$38.12M			
SRF Loans	\$171.2M	\$102.1M	-			
WIFIA Loan	-	\$699M	-			
Tax Credit Bonds	-	-	\$11.25M			
Commercial Paper						
(Authorized/Issued)	\$500M/\$41M	\$750M/\$290M	\$90M/\$20M			
Ratings						
Long-Term	Aa3/AA-	Aa3/AA	AA/AA-			
Short-Term	P-1/A-1	P-1/A-1	F-1/A-1			

Summary of Enterprise Debt Programs

Appendix 5, Continued: Outstanding Revenue Bonds by Series

Outstanding Bonds (as of Dec 2018)	RBOC	Issue Date	Maturity Date	Original Par / Capacity (\$000s)	Outstanding Principal (\$000s)	Notes (All dollars in 000s)
WATER						
1991 Revenue Bonds, Series A	No	05/08/91	11/01/19	\$70,146	\$2,100	Water Capital – R&R
2009 Revenue Bonds, Series A	Yes	08/19/09	11/01/39	\$412,000	\$9,635	Water Capital – WSIP
2009 Revenue Bonds, Series B	Yes	09/15/09	11/01/39	\$412,000	\$9,635	Water Capital – WSIP
2010 Revenue Bonds, Series A	Yes	06/17/10	11/01/30	\$56,945	\$2,530	Water Capital - Advanced Meter Infrastructure (AMI)
2010 Revenue Bonds, Series B	Yes	06/17/10	11/01/40	\$417,720	\$384,975	Water Capital – WSIP (Build America Bonds (BABs))
2010 Revenue Bonds, Series D (NM)	Yes	08/04/10	11/01/21	\$71,360	\$30,945	Water Capital – WSIP
2010 Revenue Bonds, Series D (R)	No	06/04/10	11/01/21	\$31,365	\$16,825	Refunded part of 2002 Bonds
2010 Revenue Bonds, Series E	Yes	08/04/10	11/01/40	\$344,200	\$344,200	Water Capital – WSIP (Build America Bonds (BABs))
2010 Revenue Bonds, Series F	Yes	12/22/10	11/01/30	\$180,960	\$23,975	Water Capital – WSIP
2010 Revenue Bonds, Series G	Yes	12/22/10	11/01/50	\$351,470	\$351,470	Water Capital – WSIP (Build America Bonds (BABs))
2011 Revenue Bonds, Series A	Yes	08/04/11	11/01/41	\$602,715	\$322,480	Water Capital – WSIP
2011 Revenue Bonds, Series B	Yes	08/04/11	11/01/41	\$28,975	\$17,870	Water Capital - Hetch Hetchy Water
2011 Revenue Bonds, Series C	Yes	08/04/11	11/01/41	\$33,595	\$19,475	Water Capital - Water main improvements
2011 Revenue Bonds, Series D	No	08/04/11	11/01/28	\$55,465	\$19,135	Refunded part of 2001 and 2002 Bonds
2012 Revenue Bonds, Series A	Yes	06/07/12	11/01/43	\$591,610	\$459,455	Water Capital – WSIP
2012 Revenue Bonds, Series B	Yes	06/07/12	11/01/43	\$16,520	\$16,520	Legal settlement reimbursement, Prop A (Nov 2002)
2012 Revenue Bonds, Series C	No	06/07/12	11/01/32	\$93,750	\$78,035	Refunded part of 2002 Bonds and all remaining 2001 Bonds
2012 Revenue Bonds, Series D	No	08/07/12	11/01/19	\$24,040	\$12,215	Refunded all remaining 2002 B Bonds
						Refunded all outstanding 2006A bonds and a portion of 2009A
2015 Revenue Bonds, Series A	No	04/16/15	11/01/36	\$429,600	\$426,380	Bonds (WSIP)
2016 Revenue Bonds, Series A	No	10/20/16	11/01/39	\$763,005	\$763,005	Partially refunded 2009A, 2009B, and 2010F Bonds (WSIP)
2016 Revenue Bonds, Series B	No	10/20/16	11/01/30	\$130,815	\$104,900	Fully refunded 2006B, 2006C, and partially refunded 2010A Bonds
2016 Revenue Bonds, Series C (G)	No	12/14/16	11/01/46	\$259,350	\$248,360	Water Capital – WSIP
2017 Revenue Bonds, Series A (G)	Yes	12/13/17	11/01/47	\$121,140	\$121,140	Water Capital – WSIP
2017 Revenue Bonds, Series B	Yes	12/13/17	11/01/47	\$147,725	\$147,725	Water Capital – Non-WSIP
2017 Revenue Bonds, Series C	Yes	12/13/17	11/01/47	\$70,675	\$70,675	Water Capital - Hetch Hetchy Water
2017 Revenue Bonds, Series D (G)	No	12/28/17	11/01/35	\$350,305	\$349,470	Partially refunded 2011A, and 2012A (WSIP)
2017 Revenue Bonds, Series E	No	12/28/17	11/01/31	\$48,890	\$48,890	Partially refunded 2011C, 2011D and 2012C
2017 Revenue Bonds, Series F	No	12/28/17	11/01/31	\$8,705	\$8,705	Partially refunded 2011B
2017 Revenue Bonds, Series G (G)	No	12/28/17	11/01/24	\$33,780	\$33,780	Partially refunded 2011A (WSIP)
Total Bonds - Water				\$6,158,826	\$4,444,505	Principal: 11/1 / Interest: 5/1 & 11/1

WASTEWATER		T. T.				
2010 Revenue Bonds, Series A	Yes	06/08/10	10/01/21	\$47,050	\$47,050	Wastewater Capital
2010 Revenue Bonds, Series B	Yes	06/08/10	10/01/40	\$192,515	\$192,515	Wastewater Capital - Build America Bonds (BABs)
2013 Revenue Bonds, Series A (R)	No	01/30/13	10/01/25	\$193,400	\$98,585	Refunded 2003A Bonds and SRF loans
2013 Revenue Bonds, Series B (NM)	Yes	02/27/13	10/01/42	\$331,585	\$331,585	Wastewater Capital
2016 Revenue Bonds, Series A (G)	Yes	05/24/16	10/01/46	\$240,580	\$240,580	Wastewater Capital - SSIP
2016 Revenue Bonds, Series B	Yes	05/24/16	10/01/46	\$67,820	\$67,820	Wastewater Capital – R&R
2018 Revenue Bonds, Series A (G)	Yes	08/09/18	10/01/43	\$229,050	\$229,050	Wastewater Capital – SSIP
2018 Revenue Bonds, Series B	Yes	08/09/18	10/01/43	\$185,950	\$185,950	Wastewater Capital – R&R
2018 Revenue Bonds, Series C (G)	Yes	08/09/18	10/01/48	\$179,145	\$179,145	Wastewater Capital – SSIP
Total Bonds – Wastewater				\$1,667,095	\$1,572,280	Principal: 10/1 / Interest: 4/1 & 10/1
POWER						
2015 Revenue Bonds, Series A (G)	Yes	05/20/15	11/01/45	\$32,025	\$32,025	Power Capital – Hydrogeneration and other capital
2015 Revenue Bonds, Series B	Yes	05/20/15	11/01/26	\$7,530	\$6,090	Power Capital – Power transmission
Total Bonds - Power (Senior)				\$39,555	\$38,115	Principal: 11/1 / Interest: 5/1 & 11/1
Tax Credit Bonds						
2008 Cl. Renewable Energy Bonds	Yes	11/07/08	12/15/22	\$6,325	\$2,108	Solar projects
2012 New Cl. Renewable Energy				\$6,600	\$1,000	
Bonds	Yes	04/25/12	04/25/28	\$0,000	<i>Q</i> .,000	Solar projects
2011 Qualified Energy Cons. Bonds 2015 New Cl. Renewable Energy	Yes	12/15/11	12/15/27	\$8,291	\$5,294	Solar and building efficiency projects
Bonds	Yes	10/15/15	10/25/32	\$4,100	\$3,537	Solar projects
						Payment dates: various / investors receive a tax credit in lieu
Total - CREBs, NCREBS, QECBs				\$25,316	\$11,939	of interest payment
Total – Power				\$64,871	\$50,054	
				Ψ07,071	ψ50,034	
TOTAL – SFPUC				\$7,890,792	\$6,066,839	

Appendix 5, Continued: SFPUC New Money Debt Issuance 2018

Enterprise	Debt Issuance	Amount (par)
Water	-	-
Wastewater	Bond Series 2018 ABC*	\$594,145,000
	WIFIA Loan	\$699,243,023
Power	-	-

*Wastewater Series 2018A and C sold as Green Bonds