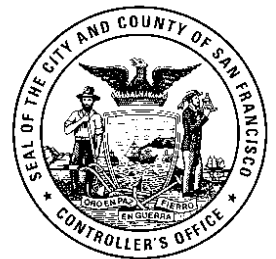


# The San Francisco Public Utilities Commission Spent Revenue Bond Funds for Allowable Purposes but Should Strengthen Its Compliance and Monitoring Controls

San Francisco Public Utilities Commission



August 30, 2023

City & County of San Francisco  
Office of the Controller  
City Services Auditor

## About the Audits Division

The City Services Auditor (CSA) was created in the Office of the Controller through an amendment to the Charter of the City and County of San Francisco (City) that voters approved in November 2003. Within CSA, the Audits Division ensures the City's financial integrity and promotes efficient, effective, and accountable government by:

- Conducting performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of service delivery and business processes.
- Investigating reports received through its whistleblower hotline of fraud, waste, and abuse of city resources.
- Providing actionable recommendations to city leaders to promote and enhance accountability and improve the overall performance and efficiency of city government.

### Team:

Massanda D'Johns, *Lead Audit Manager*  
Hunter Wang, *Audit Manager*  
Jeancarlos Santos Palacios, *Audit Intern*

Mark de la Rosa  
Director of Audits  
Office of the Controller  
City and County of San Francisco  
(415) 554-7574

### Consultants:

HKA Global, Inc.  
Yano Accountancy Corporation

For media inquiries, please contact  
[con.media@sfgov.org](mailto:con.media@sfgov.org).

 [sf.gov/controller](https://sf.gov/controller)  
 [@sfcontroller](https://twitter.com/sfcontroller)  
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## Audit Authority

This audit was conducted under the authority of the San Francisco Charter, Section 3.105, and Appendix F, which requires that CSA conduct periodic, comprehensive financial and performance audits of city departments, services, and activities.



**OFFICE OF THE CONTROLLER**  
CITY AND COUNTY OF SAN FRANCISCO

Ben Rosenfield  
Controller

Todd Rydstrom  
Deputy Controller

August 30, 2023

Public Utilities Revenue Bond Oversight Committee  
San Francisco Public Utilities Commission  
525 Golden Gate Avenue, 2nd Floor  
San Francisco, CA 94102

San Francisco Public Utilities Commission  
525 Golden Gate Avenue, 13<sup>th</sup> Floor  
San Francisco, CA 94102

Dennis Herrera  
General Manager  
San Francisco Public Utilities Commission  
525 Golden Gate Avenue, 13<sup>th</sup> Floor  
San Francisco, CA 94102

Dear Committee Members, Commissioners, and General Manager Herrera:

The Office of the Controller (Controller), City Services Auditor (CSA), Audits Division, presents its audit report of the revenue bond program administered by the San Francisco Public Utilities Commission (SFPUC). The Public Utilities Revenue Bond Oversight Committee (RBOC) engaged CSA, which, in turn, engaged HKA Global, Inc. (HKA) and, as its subcontractor, Yano Accountancy Corporation (YAC), to conduct the audit. The audit had as its objectives to determine whether revenue bond funds were spent in accordance with the stated purposes and permissible use of such bonds.

The audit concluded that nearly all revenue bond expenditures were spent appropriately. However, the audit identified \$15.36 million in questionable expenditures related to internal control weaknesses over SFPUC's control environment and monitoring of its procurement policies and procedures. We recommend that SFPUC improve documentation controls over its procurement solicitation requirements. We also recommend that SFPUC coordinate with RBOC to strengthen its monitoring activities of overhead rates on capital projects funded with revenue bond proceeds. The department's response is attached as Appendix B. CSA will work with the department to follow up every six months on the status of the open recommendations made in this report.

CSA, HKA, and YAC appreciate the assistance and cooperation of all staff involved in this audit. For questions about the report, please contact me at [mark.p.delarosa@sfgov.org](mailto:mark.p.delarosa@sfgov.org) or 415-554-7574 or CSA at 415-554-7469.

Respectfully,

A handwritten signature in black ink, appearing to read "Mark de la Rosa".

Mark de la Rosa  
Director of Audits

cc: Board of Supervisors  
Budget Analyst  
Citizens Audit Review Board  
City Attorney  
Civil Grand Jury  
Mayor  
Public Library



# **REVENUE BOND OVERSIGHT COMMITTEE**

**San Francisco Public Utilities Commission**

## **PERFORMANCE AUDIT OF SELECT REVENUE BOND EXPENDITURES**

**PHASE II**

**August 30, 2023**

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# 1. EXECUTIVE SUMMARY

## Introduction

The San Francisco Public Utilities Commission ("SFPUC"), a department of the City and County of San Francisco ("City"), has embarked on multiple construction programs in its Water, Wastewater, and Power enterprises. The voters approved Proposition A and Proposition E in 2002, which authorized SFPUC to issue bonds to fund the costs of the construction programs, which currently have total forecasted expenditures of approximately \$17 billion; actual program expenditures through June 30, 2022, are \$8.8 billion. Funding of the expenditures through June 30, 2022, includes roughly \$6.7 billion in bond proceeds from bond issuances authorized by Propositions A and E. The remaining \$2.1 billion is funded by a combination of investment earnings on unexpended proceeds, Federal and state loans and grants, commercial paper, and SFPUC revenues.

The voters also passed Proposition P in 2002, which created City Administrative Code Section 5A.30-5A.36, which in turn authorized the establishment of the Public Utilities Revenue Bond Oversight Committee ("RBOC"). RBOC's authorities under City Administrative Code 5A.31(b)(6) include the *"...independent review and evaluation of the disbursement and expenditure of the proceeds of such revenue bonds by accessing any funds set aside for this purpose...to retain outside auditors, inspectors and necessary experts to conduct such independent review..."* RBOC retained the Office of the Controller's City Services Auditor ("CSA") to conduct a performance audit of bond-funded expenditures to determine whether expenditures were allowable under bond resolutions, properly supported, and assigned or allocated to the correct project(s) within bond series, and to evaluate the effectiveness of internal control over the allowability, and assignment of expenditures.

CSA engaged HKA Global, Inc. ("HKA") and Yano Accountancy Corporation ("YAC" collectively referred to as the "Audit Team") to conduct a performance audit of six SFPUC bond series subject to RBOC oversight. This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Summary of Findings and Recommendations

We found two contracts in which SFPUC did not comply with established internal control guidance and preferred procurement practices. The non-compliance with preferred procurement practices also increased the risk environment for waste and/or abuse. Total expenditures on these two contracts subject to RBOC oversight was \$15.36 million.

SFPUC is not quantifying or reporting the monetary impact of SFPW's overhead rates on total sewer engineering direct labor and benefits to the RBOC. Since future Wastewater project expenditures subject to RBOC oversight are expected to be in the billions of dollars, substantial SFPW sewer engineering overhead on direct labor and benefits are expected to be in such expenditures.

Summary of Our Findings and Recommendations	
<b>Non-Completion of Impartiality and Confidentiality Statements by All Individuals Associated with Procurements</b>	SFPUC did not comply with established internal control guidance and City preferred procurement practices by not obtaining signed impartiality and conflict of interest statements from all individuals participating in procurement solicitations. This pervasive internal control design deficiency existed during the procurement process for a contract awarded to an entity controlled by an individual who had a joint investment with the former SFPUC Assistant General Manager – Infrastructure (and later, SFPUC General Manager). The circumstances surrounding the timing of the sale of the individual's share of the investment to the then Assistant General Manager – Infrastructure increased the risk environment for waste and abuse. We questioned a total of \$15.36 million of expenditures subject to RBOC oversight.
<b>SFPUC Should Quantify and Report on Overhead Rates Charged for SFPW Sewer Engineering Activities</b>	<p>See Finding No. 1 in Section 5.</p> <p>SFPUC is not quantifying or reporting the monetary impact of SFPW's overhead rates on total sewer engineering direct labor and benefits to the RBOC. The RBOC accordingly cannot discharge its oversight responsibilities on SFPW overhead expenditures charged on sewer engineering direct labor and benefits.</p> <p>Since future expenditures subject to RBOC oversight on Wastewater projects are expected to be in the billions of dollars, it is expected that substantial SFPW sewer engineering direct labor, benefits and related overhead will be included in such expenditures.</p> <p>See Finding No. 2 in Section 5.</p>

## Restriction on Use

The purpose of this performance audit is solely to evaluate SFPUC's compliance with and internal control over the allowability of expenditures under bond provisions, support for expenditures, assignment, or allocation of expenditures to correct projects within a bond series. Accordingly, this performance audit is not suitable for any other purpose.



## List of Acronyms

<b>SFPUC</b>	San Francisco Public Utilities Commission
<b>City</b>	City and County of San Francisco
<b>RBOC</b>	Revenue Bond Oversight Committee
<b>CSA</b>	Office of the Controller’s City Services Auditor
<b>HKA</b>	HKA Global, LLC
<b>YAC</b>	Yano Accountancy Corporation
<b>Audit Team</b>	HKA and YAC
<b>SFPW</b>	San Francisco Public Works
<b>GM</b>	General Manager
<b>AGM</b>	Assistant General Manager
<b>Wastewater Enterprise</b>	San Francisco Wastewater Enterprise
<b>SEP</b>	Southeast Water Pollution Control Plant
<b>OSP</b>	Oceanside Water Pollution Control Plant
<b>mgd</b>	million gallons per day
<b>Water Enterprise</b>	San Francisco Water Enterprise
<b>HHWP</b>	Hetch Hetchy Water and Power
<b>Power Enterprise</b>	Hetchy Water & Hetchy Power projects in the Hetch Hetchy Program
<b>Infrastructure</b>	SFPUC Infrastructure Division
<b>SSIP</b>	Sewer System Improvement Program
<b>R&amp;R</b>	Wastewater Renewal & Replacement Program
<b>FIP</b>	Wastewater Facilities & Infrastructure Program
<b>SSIP Phase 1</b>	SSIP Phase 1 projects
<b>Other SSIP</b>	Projects not in SSIP Phase 1
<b>WSIP</b>	Water System Improvement Program
<b>WECIP</b>	Water Enterprise Capital Improvement Program
<b>Regional WECIP</b>	WECIP sub-program for the Regional Capital Improvement Program
<b>Local WECIP</b>	WECIP sub-program for the Local Capital Improvement Program
<b>HCIP</b>	Hetchy Capital Improvement Projects program
<b>HCIP Water</b>	Water projects of the HCIP Program
<b>HCIP Power</b>	Power projects of the HCIP Program
<b>HCIP Joint</b>	Joint Water and Power projects of the HCIP program
<b>FIFO</b>	First-in, First-out
<b>Government Awards</b>	Federal and State grants and loans
<b>COSO Framework</b>	COSO Internal Control-Integrated Framework
<b>PD</b>	Project Design Procedures
<b>PM</b>	Project Management Procedures
<b>CM</b>	Construction Management Procedures
<b>HydraSection</b>	SFPW’s Hydraulic Section activities
<b>SFMTA</b>	San Francisco Municipal Transit Authority
<b>MOU</b>	Memorandum of Understanding
<b>CMGC</b>	Construction Manager / General Contractor
<b>OCA</b>	Office of Contract Administration
<b>RFP</b>	Request for Proposal
<b>SOW</b>	Scope of Work
<b>BDF</b>	Biosolids Digester Facilities
<b>OLSE</b>	Office of Labor Standards Enforcement

<b>Acknowledgement</b>	City Solicitation/Contract Participation Acknowledgement form
<b>I/CS</b>	Impartiality/Confidentiality Statement form
<b>mlok</b>	mlok Consulting, Inc.
<b>City Attorney</b>	Office of the City Attorney
<b>CAR</b>	Corrective Action Plan

## 2. SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SFPUC is a department of the City responsible for the maintenance, operation, and development of the Wastewater, Water, and Power utility enterprises. SFPUC, led by the General Manager (“GM”), operates and manages the enterprises as separate financial entities with different enterprise funds, and each enterprise is led by an Assistant General Manager (“AGM”).

- The Wastewater Enterprise provides wastewater and stormwater collection, treatment, and disposal services for the City.
- The Water Enterprise provides drinking water to Retail Customers in the City, specific Retail Customers outside the City, and Wholesale Customers in three other Bay Area counties.
- The Power Enterprise provides hydroelectric and solar-generated electricity to municipal and public infrastructure, and other facilities in the City.

### Enterprise and Support Bureau Descriptions

#### Wastewater Enterprise

The San Francisco Wastewater Enterprise (“Wastewater Enterprise”) provides collection, treatment, and disposal services to residential, commercial, and industrial customers in the City limits and three municipal sewer service providers for residents and businesses in northern San Mateo County.

The City's collection system is a network of sewers that collect and transport both sanitary flow and stormwater runoff – commonly referred to as wastewater. Ninety-two percent of San Francisco is served by a combined sanitary and stormwater wastewater system comprising 24,800 manholes, 25,000 catch basins, 27 pump stations, and approximately 1,000 miles of sewers ranging from 8-inch diameter pipes to large transport structures measuring up to 45 feet deep by 25 feet wide.

Flows are conveyed from the collection system through the transport/storage boxes to two centralized all-weather treatment plants, the Southeast Water Pollution Control Plant (“SEP”) and the Oceanside Water Pollution Control Plant (“OSP”). These are respectively located in the southeast and southwest sections of the City. During wet weather, additional flows are conveyed to the North Point Wet-Weather Facility, located in the northeast section of the City. The collection system storage capacity is over 200 million gallons,

comprised of predominantly grey infrastructure. The maximum treatment capacity of the existing system is 575 million gallons per day (“mgd”) or 40 billion gallons annually.

Figure 2.1.1



### Water Enterprise

The San Francisco Water Enterprise (“Water Enterprise”) operates the Hetch Hetchy Regional Water System, consisting of over 389 miles of pipeline, 74 miles of tunnels, 11 reservoirs, 13 groundwater wells, 5 pump stations, and 3 water treatment plants located outside the City limits. The Water Enterprise also operates over 1,235 miles of pipeline, 11 reservoirs, six groundwater wells, 8 storage tanks, 24 pump stations, 8 hydropneumatic stations, and 17 chlorination stations located within the City limits.

The Water Enterprise serves as the retail water supplier for the City and is responsible for water deliveries to residents and institutions within the City limits and several retail accounts outside City limits. In addition, the Water Enterprise sells water to 27 Wholesale Customer entities in San Mateo, Alameda, and Santa Clara counties. Altogether, nearly 2.7 million people rely on water supplied by the Water Enterprise.

Figure 2.1.2

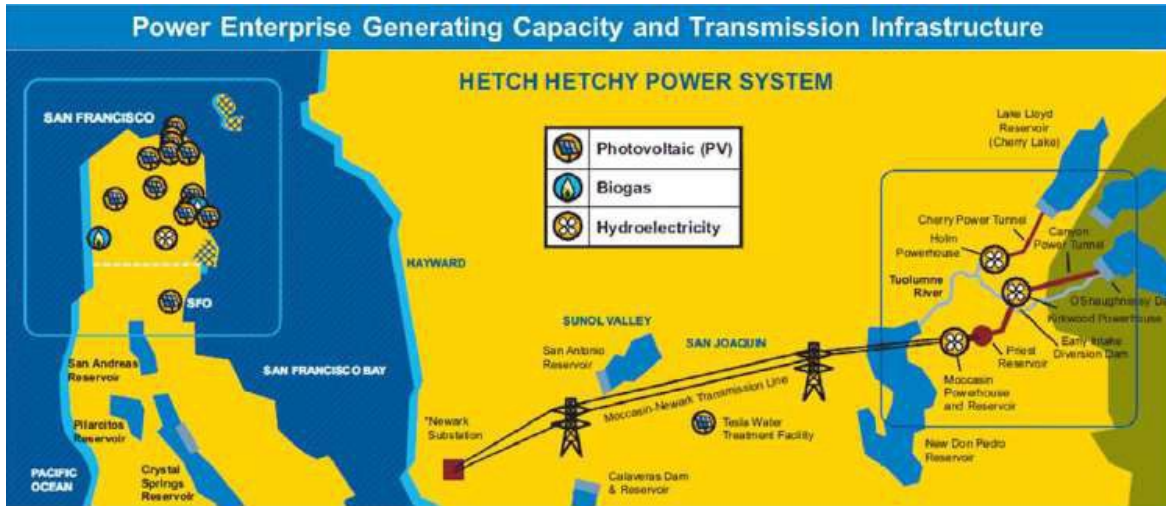


## Power Enterprise

Hetch Hetchy Water and Power (“HHWP”) operates the Hetch Hetchy Project, which consists of Hetchy Water and Hetchy Power projects (collectively referred to as the “Power Enterprise”). Hetchy Water collects, stores, purifies, and delivers water between the Sierra mountains to the eastern Alameda County, where it connects with the Water Enterprise. Hetch Hetchy Power operates the Power Enterprise, which generates, schedules, purchases, sells, and distributes electricity to meet the needs of approximately 2,400 customers, including 17% of the total electricity consumed within the City. The Power Enterprise’s capacities consist of 385MW of greenhouse gas-free hydroelectric generation, 8.5MW of solar generation, and 160 miles of energy transmission lines from Yosemite to the Bay Area.

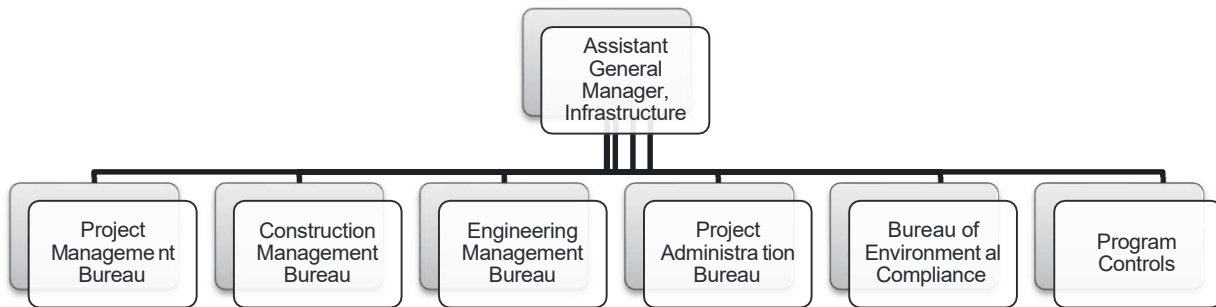
Power Enterprise customers include all municipal departments, tenants in City-owned properties, including the Port and SFO, Phase I of the Hunters Point Shipyard redevelopment projects, and tenants of the Treasure Island Development Authority on Treasure Island and Yerba Buena Island. 385,000 Power Enterprise customers have chosen to have at least 50% of their electricity usage sources from renewable sources through Clean Power San Francisco.

Figure 2.1.3



### Support Divisions and Bureaus

In addition to the three AGMs who oversees the three enterprises, three AGMs oversee the support divisions and bureaus. One AGM leads SFPUC's Infrastructure Division ("Infrastructure"), responsible for management of all SFPUC construction programs. The following is a summary of Infrastructure's organization:



Another AGM oversees SFPUC's External Affairs, and the third AGM oversees department-wide business services, such as finance, human resources, information technology and customer service.

## Enterprise Construction Programs

Historically, the SFPUC recognized that major wastewater, water, and power construction programs were necessary to upgrade existing facilities due to age and changing regulatory requirements. The City's voters recognized this with the passage of Propositions A and E in 2002, authorizing SFPUC to issue revenue bonds to fund the costs of major construction programs. SFPUC is also authorized to issue commercial paper for interim funding of programs – and multiple bond series have identified all or part of the bond proceeds to defease commercial paper used for interim funding. Bond proceeds available for expenditure also include investment earnings on unexpended bond proceeds and post-issuance releases of debt service reserves. Construction program expenditures also receive funding from revenues, and loans and grants from Federal and state agencies.

The following summarizes cumulative program budget and expenditures from all funding sources subject and not subject to RBOC oversight, and related cumulative bond funding as of June 30, 2022:

*Table 2.2.1  
Construction Program Expenditures  
and Program Funding  
Program Inception to June 30, 2022  
(\$000)*

SFPUC Enterprise	Current Approved Budget	Program Forecast Cost	Expenditures to Date	Bond Proceeds at Issuance
Wastewater	\$ 6,614,210	\$ 7,998,460	\$ 2,973,481	\$ 1,837,773
Water	8,080,850	8,753,880	5,745,650	4,674,443
Power	225,133	225,133	85,293	195,761
<b>TOTAL</b>	<b>\$ 14,920,193</b>	<b>\$ 16,977,473</b>	<b>\$ 8,804,424</b>	<b>\$ 6,707,977</b>

*Source: SFPUC Quarterly Construction Reports as of June 30, 2022, Bond Series Official Statements.*

## Enterprise Construction Reporting

As a result of commission approvals, SFPUC modified the construction program reporting for each of the three enterprises. In general, SFPUC's reporting is representative of the program's baseline for project scope, budget, and schedule according to the commission's approved ten-year capital plan, as established every two years.

The following subsections summarize the construction programs of Wastewater, Water and Hetchy Water, and Power.

## Wastewater Construction Programs

The Wastewater Enterprise construction program consists of three capital programs: the Sewer System Improvement Program (“SSIP”), Renewal & Replacement Program (“R&R”) and Facilities & Infrastructure Program (“FIP”).

### Sewer System Improvement Program

The SSIP is a City-wide investment to upgrade SFPUC’s aging infrastructure to ensure a reliable, sustainable, and seismically safe sewer system. It contains a series of major capital improvement projects necessary to bring the City’s wastewater and stormwater system into a state of good repair and meet the Commission-endorsed goals and levels of service.

In fiscal year 2022, the SSIP program transitioned from its original intent of three distinct SSIP phases spanning over a 20-year period, to implementing capital improvement projects as part of a rolling ten-year capital plan. The Commission authorized the 2020 SSIP baseline, where a selection of high-priority projects identified initially in phases 2 and 3 were initiated. SSIP projects are now reported within either phase 1 (“SSIP Phase 1”) or other (“Other SSIP”). As of June 2022, SSIP Phase 1 has 70 projects in various construction stages and is approximately 52% complete, and Other SSIP includes 35 projects in different construction stages and is about 3% complete.

The Wastewater Enterprise SSIP construction program consists of four sub-programs: Treatment Facility Projects, Collection Systems, Land Reuse, and SSIP Program Management. The Treatment Facilities and Collection Systems sub-programs are further broken down into categories, with numerous construction projects in each category.

### Repair and Replacement Program

R&R is a continual program that addresses deficiencies in the R&R collection system (29 projects) and R&R treatment facilities (9 projects). The R&R program seeks to comply with State-mandated requirements and to meet the endorsed levels of service goals, regulatory permit compliance, system reliability and functionality, and sustainable operation of the City’s sewer system. Capital projects that fall outside of the SSIP and R&R programs are addressed by the Facilities and Infrastructure program.

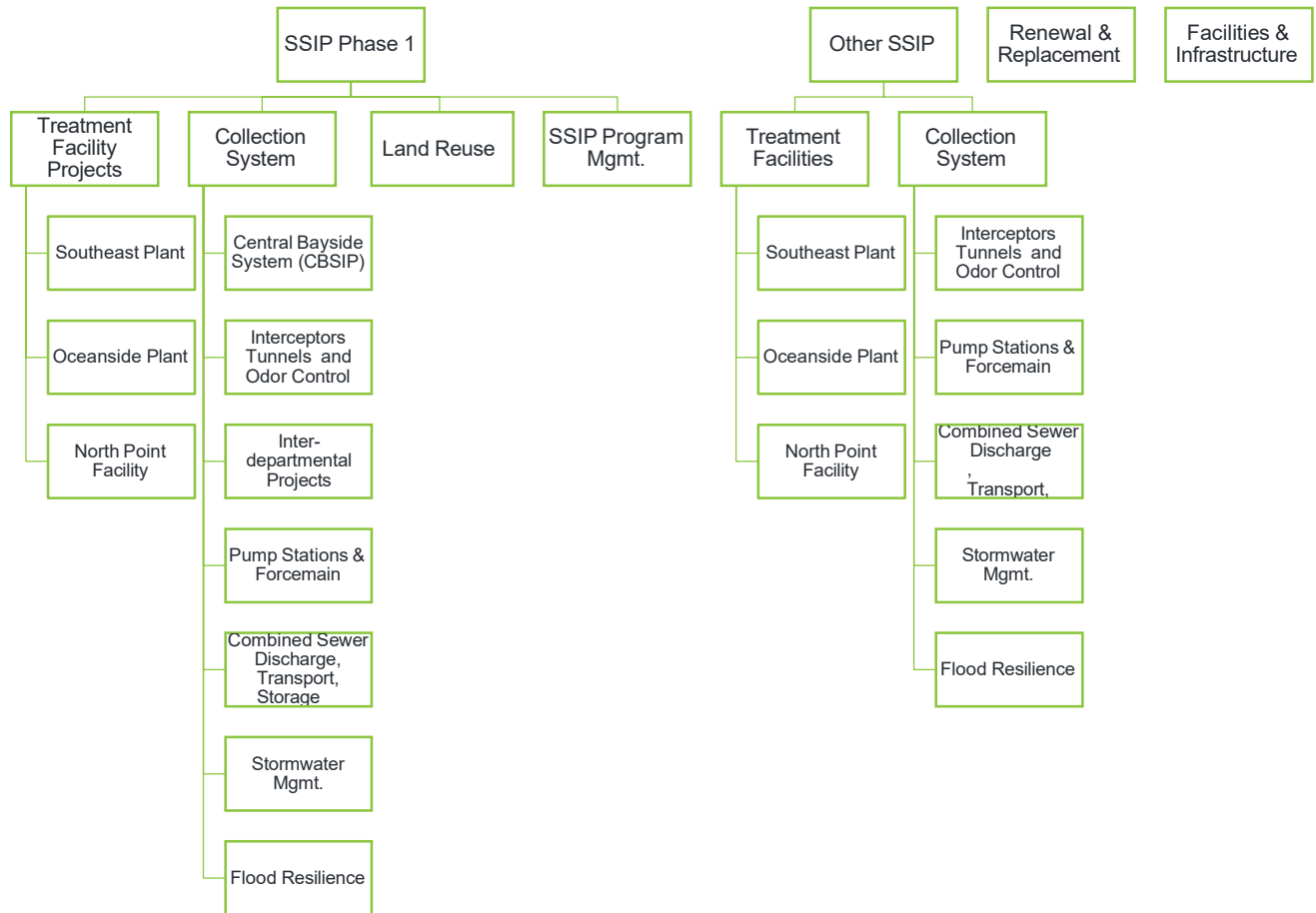
### Facilities and Infrastructure Program

The Facilities and Infrastructure program (5 projects) provides upgrades to aging facilities to maintain their intended functions.



Figure 2.2.1 below shows the hierarchy of the Wastewater Enterprise Construction Program.

*Figure 2.2.1  
Wastewater Construction Program Hierarchy<sup>1</sup>*



<sup>1</sup> SFPUC FY 2021-22 Q4 Report

The following table identifies the Wastewater Enterprise construction programs, including forecast costs and expenditures for each as of June 2022:

*Table 2.2.2  
Wastewater Construction Program  
Budget, Forecast, and Expenditures  
Program Inception to June 30, 2022  
(\$000)*

Wastewater Enterprise	Current Approved Budget	Program Forecast Cost	Expenditures to Date
<b>SSIP</b>			
Phase 1	\$ 3,655,300	\$ 4,852,500	\$ 1,949,000
Other SSIP	1,197,300	1,381,600	25,800
<b>Subtotal SSIP</b>	<b>4,852,600</b>	<b>6,234,100</b>	<b>1,974,800</b>
<b>Non-SSIP</b>			
Renewal and Replacement	1,099,000	1,088,800	810,811
Facilities and Infrastructure	662,610	675,560	187,870
<b>Subtotal Non-SSIP</b>	<b>1,761,610</b>	<b>1,764,360</b>	<b>998,681</b>
<b>TOTAL WASTEWATER</b>	<b>\$ 6,614,210</b>	<b>\$ 7,998,460</b>	<b>\$ 2,973,481</b>

*Note: Program Budget and Forecast Costs are unaudited.*

*Source: Wastewater Enterprise Construction Program Reports as of June 30, 2022*

## Water and Hetch Hetchy Water Construction Programs

The Water Enterprise construction program is driven by the fact that certain of its facilities are near the end of their useful life. Long-lived facilities result in decreased reliability due to unplanned outages and place a greater maintenance burden on SFPUC operations. The Water Enterprise construction program consists of the Water System Improvement Program ("WSIP"), which is ~99% complete, and the Water Enterprise Capital Improvement Program ("WECIP"). WECIP consists of two sub-programs. The Regional Capital Improvement Program ("Regional WECIP") includes 25 projects in various construction stages, and the Local Capital Improvement Program ("Local WECIP") includes 7 groups of projects in different construction stages.

In addition to WSIP and WECIP, the Water Enterprise construction program also includes water-related projects of Hetch Hetchy Water and Power ("HHWP"), which is responsible for operating, managing, and maintaining the upcountry HHP system and facilities. The HHWP capital improvement programs are divided into two programs: the Renewal and Replacement program and the Hetchy Capital Improvement Projects ("HCIP") program.

Water renewal and replacement projects are completed and closed out and, therefore, are not included in SFPUC's construction reports.

The scope of HCIP is divided into three major sub-programs: water ("HCIP Water"), power ("HCIP Power"), and joint ("HCIP Joint").

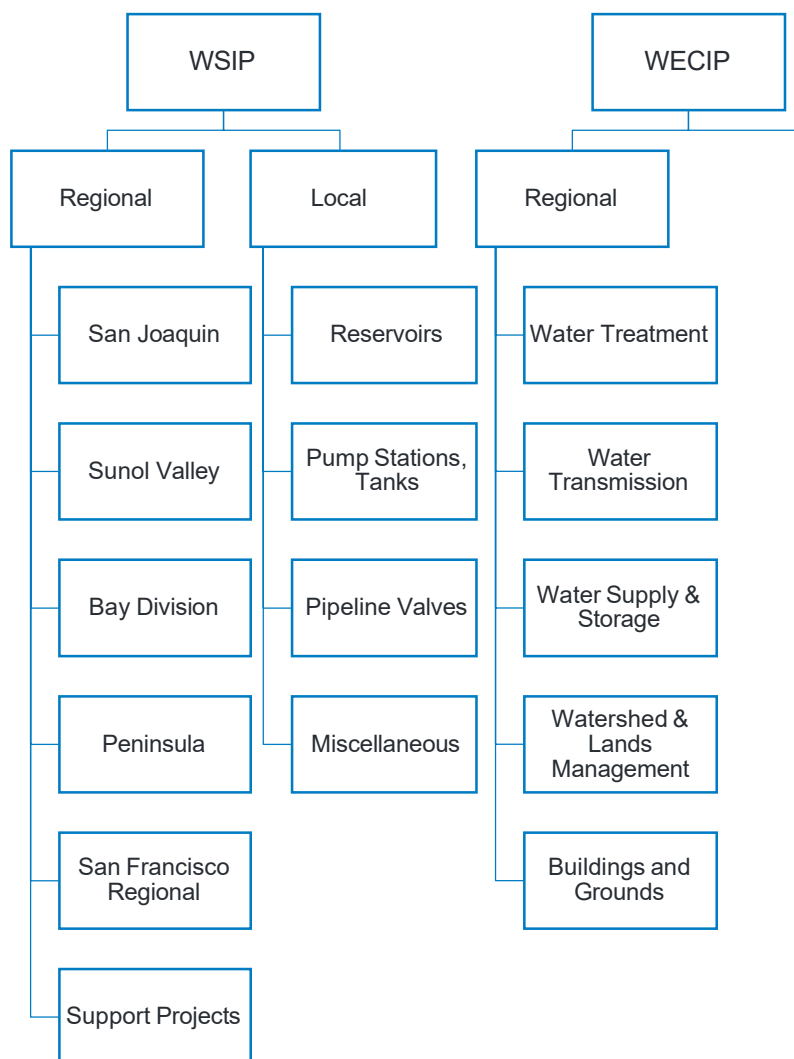
- HCIP Water sub-program includes only asset improvements benefitting the SFPUC's water customers.
- HCIP Power sub-program includes only asset improvements used to generate environmentally friendly hydroelectric energy.

- HCIP Joint sub-program includes projects for assets used for both water delivery and power generation.

Other water expenditures are related to litigation settlement expenditures funded by proceeds from water 2012 Series B bonds. Water renewal and replacement projects are completed and closed out and, therefore, are not included in SFPUC’s construction reports.

Figure 2.2.2 below is the hierarchy of the WSIP and WECIP programs and the project groups included within each sub-program. HCIP Water and Joint programs are shown in the following HCIP section.

*Figure 2.2.2  
Water Construction Program Hierarchy<sup>2</sup>*



<sup>2</sup> WSIP Regional Projects Quarterly Report, 4<sup>th</sup> Quarter/Fiscal Year 2021-22

The following table identifies the Water programs for WSIP, WECIP, HCIP Water, and HCIP Joint sub-programs, including the current approved budget, forecast costs, and expenditures from all funding sources subject and not subject to RBOC oversight as of June 30, 2022:

*Table 2.2.3  
Water Construction Program  
Budget, Forecast, and Expenditures  
Program Inception to June 30, 2022  
(\$000)*

Water Enterprise	Current Approved	Program Forecast Cost	Expenditures to Date
<b>WSIP</b>			
Regional	\$ 3,803,100	\$ 3,803,100	\$ 3,708,300
Local	331,900	331,900	331,900
Local Water Supply	280,900	280,900	220,400
Financing	372,000	372,000	372,000
<b>Subtotal WSIP</b>	<b>\$ 4,787,900</b>	<b>\$ 4,787,900</b>	<b>\$ 4,632,600</b>
<b>WECIP</b>			
Regional	918,790	1,030,280	194,520
Local	1,755,360	2,271,390	792,670
<b>Subtotal WECIP</b>	<b>\$ 2,674,150</b>	<b>\$ 3,301,670</b>	<b>\$ 987,190</b>
<b>HCIP Water &amp; Joint</b>			
HCIP Water	109,530	153,270	11,100
HCIP Joint	493,520	495,290	99,010
<b>Subtotal HCIP Water &amp; Joint</b>	<b>603,050</b>	<b>648,560</b>	<b>110,110</b>
Mitchell Engineering Litigation Settlement	15,750	15,750	15,750
<b>TOTAL WATER</b>	<b>\$ 8,080,850</b>	<b>\$ 8,753,880</b>	<b>\$ 5,745,650</b>

*Source: Water Enterprise Construction and Hetch Hetchy Construction Program Reports as of June 30, 2022*

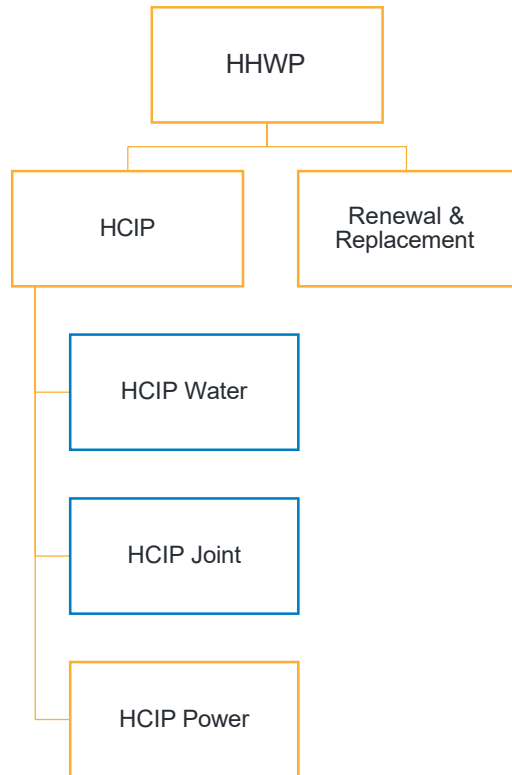
*Note: Program Budget and Forecast Costs are unaudited. The WSIP Local Water Supply projects underwent a September 2013 re-baseline. Only the original WSIP portion of the re-baselined costs are reported in WSIP. The remaining budget is funded under the WECIP Local and is managed outside the purview of the WSIP.*

## Hetchy Capital Improvement Program

The HCIP includes both Power and Water sub-programs. The HCIP Power sub-program includes only asset improvements used to generate environmentally friendly hydroelectric energy. HCIP Power's sub-program consists of powerhouses that convey water through hydroelectric turbines to generate electricity, power substation transformers, and transformation lines that convey electricity generated by power assets. Other project expenditures are related to non-programmatic capital projects with funding subject to RBOC oversight. As a result of SFPUC's changes in reporting, completed projects are no longer included in quarterly status reports.

Figure 2.2.3 below shows the hierarchy of the Hetchy Capital Improvement Program, which shows the HCIP Water and HCIP Joint sub-programs that are included within the Water Enterprise, and HCIP Power sub-program that is included in the Power Enterprise.

**Figure 2.2.3**  
**Power Construction Program Hierarchy<sup>3</sup>**



The following table identifies the HCIP Power sub-program, including the current approved budget, forecast costs, and expenditures from all funding sources subject and not subject to RBOC oversight as of June 30, 2022:

**Table 2.2.4**  
**Power Construction Programs**  
**Budget, Forecast, and Expenditures**  
**Program Inception to June 30, 2022**  
**(\$000)**

Power Enterprise	Current Approved Budget	Program Forecast Cost	Expenditures to Date
<b>Power</b>			
HCIP Power	\$ 204,240	\$ 204,240	\$ 64,400
Other Projects	20,893	20,893	20,893
<b>TOTAL POWER</b>	<b>\$ 225,133</b>	<b>\$ 225,133</b>	<b>\$ 85,293</b>

*Note: Program Budget and Forecast Costs are unaudited.*

*Source: Hetch Hetchy Construction Program Reports as of June 30, 2022, and SFPUC Finance.*

<sup>3</sup> Hetch Hetchy Capital Improvement Program Quarterly Report, 4<sup>th</sup> Quarter / Fiscal Year 2021-2022

### 3. PARTIES INVOLVED WITH THE PERFORMANCE AUDIT

In addition to SFPUC as auditee, RBOC, CSA, and the team of HKA and YAC (referred to as the “Audit Team”) all have significant roles and responsibilities in the performance audit.

#### Revenue Bond Oversight Committee

The City's voters approved Propositions A, E, and P in 2002. Propositions A and E gave SFPUC the authority to issue revenue bonds to fund construction programs. Proposition P created Administrative Code Section 5A.30-36 and authorized the establishment of RBOC. Administrative Code Section 5A.36 charges RBOC with providing independent oversight of the expenditure of public utility revenue bond proceeds issued under the authority of Proposition A or E for capital improvements. RBOC helps ensure an uninterrupted supply of water, power, and wastewater treatment services by SFPUC to its customers. Further, RBOC helps ensure public dollars are spent according to the authorizing bond resolution and applicable laws.

RBOC engaged CSA to oversee the performance audit to determine whether SFPUC expenditures of bond proceeds were in accordance with bond provisions, adequately supported, and properly assigned or allocated to project(s) within a bond series and evaluate internal control over these expenditures.

#### City Services Auditor – Audits Division

The CSA - Audits Division is the City's internal auditor, providing performance, financial, and compliance auditing and managing the City's whistleblower, public integrity, and cybersecurity programs. The CSA – Audits Division produces a wide range of audit reports and performance reports relating to the City's revenue, spending, service delivery, and outcomes. RBOC has contracted with the CSA – Audits Division to oversee this performance audit, which in turn has contracted with HKA with YAC as a subcontractor to conduct the Revenue Bond Performance Audit.

#### The Audit Team

HKA is a global consultancy company with over 40 years of experience and has completed numerous performance audits on some of the largest and most complex programs/projects in the world. YAC is a regional CPA and consulting firm and has worked directly with the City and County of San Francisco and the San Francisco Public Utilities Commission for over 27 years, performing audits per GAGAS and other relevant auditing and assurance standards. The principals from HKA and YAC, who are ultimately responsible for the quality of the performance audit, worked together for several years at one of the “Big Four” audit and consulting firms.

## 4. THE PERFORMANCE AUDIT

### Scope and Objectives

The Audit Team conducted a performance audit of capital expenditures funded by proceeds from public utility revenue bonds. Forty revenue bonds subject to RBOC oversight have funded expenditures from March 1, 2006, to June 30, 2022.

The objectives of this performance audit were to determine whether expenditures from project funds were:

- Allowable under the bond resolutions, laws, and regulations,
- Properly supported,
- Assigned or allocated to the correct project(s) within a bond series, and
- Subjected to appropriate cost control measures.

### Statement of Compliance with Generally Accepted Government Auditing Standards

We conducted this performance audit under generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe we have obtained sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions.

### Information Not Subject to Any Performance Audit Procedures

We were not engaged to perform, and did not perform, any performance audit procedures on any budgeted or forecasted information included in this report. Such information is identified as unaudited. Accordingly, our audit conclusions do not extend to such information.

### Overall Methodology

The Audit Team approached the audit in three separate stages, enabling us to develop our findings and recommendations to the RBOC. These three stages encompass a high-level evaluation of each of the audit planning and survey, fieldwork, and reporting stages.

#### Stage 1 – Audit Planning and Survey Phase

Upon receiving notice to proceed for Phase 2, the Audit Team conducted an entrance meeting with RBOC and CSA to initiate the audit engagement. From this meeting, we established the audit objectives, methodology, information needs, and engagement timeline.

Next, the Audit Team performed a preliminary assessment on all revenue bonds subject to RBOC oversight. This assessment included an analysis of capital project expenditures funded by the various bond proceeds for the Wastewater, Water, and Power. The Audit Team used this information to identify six bonds to include within the Phase 2 audit scope.

The Audit Team presented the preliminary bond assessment to CSA, including the six bonds selected that address the performance audit's scope and objectives.

## Stage 2 – Audit Fieldwork

The Audit Team developed an audit plan using information obtained during the audit planning and survey stage. This plan served as our framework and approach for completing the audit fieldwork. The Audit Team engaged multiple SFPUC Infrastructure and SFPUC Financial Services departments to request bond documentation, capital project files, and other related documentation. Additionally, we held discussions with SFPUC department relevant to our scope and objectives.

The Audit Team's fieldwork yielded the audit evidence used to formulate our findings, conclusions, and ultimately our recommendations to the RBOC.

## Stage 3 - Reporting

Based upon the information collected during our fieldwork, the Audit Team developed a preliminary list of observations and distributed this information for SFPUC comment. We revised our initial observations and held follow-up meetings with each department to confirm our understanding of the information further provided to us.

The Audit Team periodically met with CSA to provide progress updates and coordinate audit fieldwork. Also, the Audit Team provided updates to RBOC during their monthly public meetings. The culmination of our audit fieldwork is represented throughout this performance audit report, including the Audit Team's findings and recommendations to the RBOC.

## Performance Audit Risk Assessment

SFPUC Finance provided the Audit Team with schedules for Water, Wastewater, and Power showing expenditures by bond series. The Audit Team used these schedules, along with SFPUC's general ledger, to summarize all debt-funded expenditures by project for Water and Wastewater. The Audit Team then analyzed this information to identify bonds that fit within RBOC's scope and objectives.

Attributes	
<b>Revenue Bonds</b>	<ul style="list-style-type: none"> <li>• Large net proceeds available for capital expenditures</li> <li>• Funds used to defease commercial paper</li> <li>• Bonds associated with historically high-risk projects</li> <li>• Large spend across many projects</li> <li>• Significant spend on two or three projects</li> </ul>
<b>Capital Programs and Projects</b>	<ul style="list-style-type: none"> <li>• Inherent project complexities (e.g., heavy civil construction and non-typical projects)</li> <li>• Projects with forecasted costs above baseline budgets</li> <li>• Projects with numerous construction schedule delays</li> <li>• Projects managed by other City agencies</li> </ul>

## Bond Series Selected for the Performance Audit

The Audit Team selected six bond series for our performance audit from the 40-bond series subject to RBOC oversight as of June 30, 2022 – three from Wastewater, two from Water, and one from Power.



- The three-bond series from Wastewater represented three high-dollar bond series after 2016 Series A, the most recent bond series subject to our performance audit in Phase 1.
- The two-bond series from Water represented two high-dollar bond series used to fund the water-related expenditures on Hetchy Water projects.
- The Power bond series was the larger of the two Power bond series subject to RBOC oversight.

*Table 4.4.1  
Bonds Selected for Phase II of the Performance Audit*

Wastewater	Water	Power
2018 Series A	2016 Series C	2015 Series A
2018 Series C	2017 Series C	
2021 Series A		

The total available proceeds and expenditures from each of these bond series are in the tables 4.4.2 through 4.4.4.

Refer to Section 8.2 for a complete list of revenue bonds subject to RBOC oversight as of June 30, 2022.

The Official Statement for each bonds series identifies the amounts deposited to SFPUC's capital projects fund and the defeasance of commercial paper issued to fund capital expenditures temporarily. Amounts in the Official Statement are adjusted for investment earnings on unexpended proceeds and other adjustments (typically adjustments to bond issuance and underwriter's fees, and transfers to RBOC) to determine total available proceeds.

The following table summarizes the total available proceeds, expenditures, and unexpended proceeds by bond series for the three Wastewater bond series subject to the performance audit.

*Table 4.4.2  
Available Proceeds, Expenditures  
and Unexpended Proceeds by Wastewater Bond Series  
(\$000)*

Wastewater	2018 Series A	2018 Series C	2021 Series A	Total
Proceeds from Official Statements				
Capital projects fund	\$ 215,997	\$ 170,720	\$ -	\$ 386,717
Commercial paper defeased	25,016	-	296,000	321,016
Subtotal proceeds from Official Statements	241,013	170,720	296,000	707,733
Post-issuance adjustments				
Investment earnings	5	-	-	5
Other adjustments	-	-	-	-
Subtotal post-issuance adjustments	5	-	-	5
<b>TOTAL AVAILABLE PROCEEDS</b>	<b>241,018</b>	<b>170,720</b>	<b>296,000</b>	<b>707,738</b>
<b>EXPENDITURES</b>	<b>(241,018)</b>	<b>(170,720)</b>	<b>(296,000)</b>	<b>(707,738)</b>
<b>UNEXPENDED PROCEEDS</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

Source: SFPUC General Ledger and Bond Series Official Statements

The following table summarizes the total available proceeds, expenditures, and unexpended proceeds by bond series for the two Water bond series subject to the performance audit.

**Table 4.4.3**  
*Available Proceeds, Expenditures  
and Unexpended Bond Proceeds by Water Bond Series  
(\$000)*

Water	2016 Series C	2017 Series C	Total
Proceeds from Official Statements			
Capital projects fund	\$ 19,975	\$ 15,000	\$ 34,975
Commercial paper defeased	236,847	60,265	297,112
Subtotal proceeds from Official Statements	256,822	75,265	332,087
Post-issuance adjustments			
Investment earnings	394	126	520
Other adjustments	268	-	268
Subtotal post-issuance adjustments	662	126	788
<b>TOTAL AVAILABLE PROCEEDS</b>	<b>257,483</b>	<b>75,392</b>	<b>332,875</b>
<b>EXPENDITURES</b>	<b>(255,697)</b>	<b>(75,265)</b>	<b>(332,619)</b>
<b>UNEXPENDED PROCEEDS</b>	<b>\$ 1,786</b>	<b>\$ 126</b>	<b>\$ 256</b>

*Source: SFPUC General Ledger and Bond Series Official Statements*

The following table summarizes the total available proceeds, expenditures, and unexpended proceeds by bond series for the Power bond series subject to the performance audit.

**Table 4.4.4**  
*Available Proceeds, Expenditures  
and Unexpended Bond Proceeds by Power Bond Series  
(\$000)*

Power	2015 Series A
Proceeds from Official Statements	
Capital projects fund	\$ 30,200
Commercial paper defeased	-
Subtotal proceeds from Official Statements	30,200
Post-issuance adjustments	
Investment earnings	-
Other adjustments	-
Subtotal post-issuance adjustments:	-
<b>TOTAL AVAILABLE PROCEEDS</b>	<b>30,200</b>
<b>EXPENDITURES</b>	<b>(28,641)</b>
<b>UNEXPENDED PROCEEDS</b>	<b>\$ 1,559</b>

*Source: SFPUC General Ledger and Bond Series Official Statements*

Regarding 2015 Series A post-issuance adjustments, SFPUC did not allocate investment earnings on unexpended bond proceeds to Power 2015 Series A and 2015 Series B bonds. The Official Statement for Power 2015 Series A and B stated that investment earnings are considered revenues and are not restricted for use on capital projects, green or non-green.

## Bond Expenditure Categories and Assignment to Bonds

SFPUC establishes project categories for bond-funded expenditures. Water bond-funded project categories are classified as WSIP regional, WSIP regional (green), WSIP local, non-WSIP regional, and non-WSIP local. Wastewater project categories are SSIP, SSIP (green), non-SSIP and non-SSIP (non-green). Power bond-funded project categories are green and non-green.

SFPUC's general rule is to assign funding for expenditures within any project category with the available cash deposited on the earliest date into the City's treasury accounts (referred to as the first-in, first-out or "FIFO"). Bond proceeds that defeased outstanding commercial paper are deemed to have the deposit date of the original commercial paper issuance.

This general rule is modified for restrictions of specific bond series. Certain Water and Wastewater bond series are identified as green bonds and can only fund green projects. Other bond series are designated to fund specific project expenditures. Water 2016 Series C bonds are designated as green bonds to fund environmentally beneficial projects.

Accordingly, the FIFO by expenditure category method often results in proceeds from later bonds being expended while proceeds from earlier bond series are still available. An example is Water 2010 Series A bonds which are designated solely to local projects and Water 2010 Series C bonds, which are designated solely for regional projects. Water 2010 Series A and 2010 Series C simultaneously funded local and regional projects, respectively. All Water 2010 Series C bond proceeds were expended before Water 2010 Series A. Water 2010 Series D and later bonds funded regional expenditures while Water 2010 Series A continued to fund local projects.

Another example is Wastewater 2013 Series A and 2016 Series B bonds. Wastewater 2016 Series A bonds were designated for SSIP projects. Proceeds from Wastewater 2013 Series B bonds funded both non-SSIP and SSIP projects until the issuance of Wastewater 2016 Series A bonds. After the issuance of Wastewater 2016 Series A bonds, Wastewater 2013 Series B bonds funded only non-SSIP projects. Wastewater 2016 Series B bond proceeds were not expended until all 2013 Series B bond proceeds were expended.

This general rule is also modified for federal and state grants and loans ("Government Awards"), which fund specific expenditures. Depending on the award agreement, expenditures initially funded by bonds can have their funding source(s) changed to Government Awards. When such funding changes occur, bond proceeds from earlier bond issuances become available after a future series has been used to fund expenditures. Such newly available bond proceeds keep their original deposit date.

## Bond Funded Expenditures

As part of the audit risk analysis procedures, we summarized bond-funded expenditures by cost category identified and described below:

*Table 4.4.5*

Expenditure Category	Description
<b>Labor-related</b>	Labor and benefits charged by CCSF employees and related overhead on labor.
<b>Consultants</b>	Expenditures to consultants such as program management, project management, construction management, environmental services, specialty inspection services, systems consulting, other management consulting services.
<b>Construction contracts</b>	Expenditures to contractors for construction labor and materials.
<b>Land acquisition</b>	Expenditures for additional land.
<b>Fees, licenses, and permits</b>	Expenditures to Federal, state, and local government agencies to comply with regulatory and other requirements.
<b>Construction materials</b>	Construction materials purchased directly by SFPUC.
<b>Other allocations</b>	Allocations from within SFPUC that are not based on labor expenditures.
<b>Legal and related</b>	Expenditures under the control of the Office of the City Attorney.
<b>Commercial paper-related</b>	Expenditures for commercial paper fees and interest.
<b>Intra-City charges</b>	Expenditures to other City departments other than labor, benefits and related overhead, and expenditures to the Office of the City Attorney.
<b>Transfers</b>	Expenditures for land and buildings from other City agencies for use on SFPUC projects.
<b>All other</b>	All other non-labor expenditures not classified above.

We were provided with copies of journal entries to support entries to support all Wastewater expenditures. These entries were provided by fiscal year and transaction date, starting in fiscal year 2017-18. Transactions for fiscal years 2009-10 through 2016-17 did not have transaction dates. Also, transactions funded by commercial paper were assigned to commercial paper did not have their funding sources changed to the ultimate funding source when commercial paper was defeased by bonds.

Accordingly, to ensure that we included at least all Wastewater expenditures subject to the performance audit, our summarization includes expenditures funded by revenue bonds other than those subject to the performance audit. The following table summarizes, by auditor-selected periods, Wastewater bond-funded expenditures by expenditure classification for the periods that funded Wastewater expenditures funded by bonds subject to the performance audit.

**Table 4.4.6**  
**Wastewater Bond-Funded Expenditures**  
**by Expenditure Classification**  
**(\$000)**

Expenditure Classification	NOV2016 - Jun 2018	JUL 2018 - Sep 2019	Oct 2019 - Oct 2020	Total
<b>Labor-related and consultants</b>				
Labor-related	\$ 48,616	\$ 36,692	\$ 38,413	\$ 123,721
Consultants	63,541	75,479	68,031	207,051
Subtotal Labor-related and consultants	112,157	112,171	106,444	330,772
Construction contracts	74,454	44,124	187,582	306,160
Subtotal labor-related, consultants, and construction contracts	186,611	156,295	294,026	636,932
<b>Other expenditures</b>				
Land acquisition	-	-	-	-
Fees, licenses, and permits	150	58	47	255
Construction materials	3	-	1	4
Other allocations	-	-	-	-
Legal and related	778	219	-	997
Commercial paper related	-	-	-	-
Intra-CCSF charges	1,047	131	65	1,243
Fund transfers	56,788	5,810	-	62,598
All other	5,365	11,520	3,400	20,285
Subtotal other expenditures	64,131	17,738	3,513	85,382
<b>TOTAL EXPENDITURES</b>	<b>\$ 250,742</b>	<b>\$ 174,033</b>	<b>\$ 297,539</b>	<b>\$ 722,314</b>
Number of months in the period	20	15	13	48

Source: SFPUC General Ledger

The \$722.3 million of total expenditures shown is \$14.6 million greater than the \$707.7 million bond-funded expenditures in Table 4.4.2. This is because funding sources could change during the middle of a month. Therefore, identifying expenditures to specific funding sources is impracticable.

Transfers to the City's general fund are for the transfer of the 1800 Jerrold property to SFPUC, and construction of a replacement facility for the City's Office of Contract Administration. These are classified as transfers in the City's accounting system since the property transfers involved only City agencies and no outside parties.

Sixty-one percent (61%) of the construction expenditures occurred in the final 13 months of this 48-month period. This reflects the substantial completion of design and engineering activities on certain projects during the first 35 months, while design and engineering activities occurred on other projects during the final 13 months of the 48-month period.

The following table summarizes Wastewater bond-funded expenditures by expenditure classification as a percentage of total expenditures (also known as “common size”):

**Table 4.4.7**  
**Wastewater Bond-Funded Expenditures by Expenditure Classification**  
**as a Percentage of Total Expenditures**  
**(\$000)**

Expenditure Classification	Nov2016 - Jun 2018	Jul 2018 - Sep 2019	Oct 2019 - Oct 2020	Total
<b>Labor-related and consultants</b>				
Labor-related	19.39%	21.08%	12.91%	17.13%
Consultants	25.34	43.37	22.86	28.66
Subtotal Labor-related and consultants	44.73	64.45	35.77	45.79
Construction contracts	29.69	25.35	63.05	42.39
Subtotal labor-related, consultants, and construction contracts	74.42	89.80	98.82	88.18
<b>Other expenditures</b>				
Land acquisition	-	-	-	-
Fees, licenses, and permits	0.06	0.03	0.02	0.04
Construction materials	0.00	-	0.00	0.00
Other allocations	-	-	-	-
Legal and related	0.31	0.13	-	0.14
Commercial paper related	-	-	-	-
Intra-CCSF charges	0.42	0.08	0.02	0.17
Fund transfers	22.65	3.34	-	8.67
All other	2.14	6.62	1.14	2.81
Subtotal other expenditures	25.58	10.19	1.18	11.82
<b>TOTAL EXPENDITURES</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Number of months in the period	20	15	13	48

Source: SFPUC General Ledger

As indicated above, the timing of certain projects resulted in higher construction expenditures between October 2019 and October 2020 than in the other two periods.

The percentage of fund transfers funded by Water 2018 Series A bonds is consistent with the timing of the transfer of the 1800 Jerrold property from the City’s General Fund to SFPUC.

The following table summarizes the journal entries to transfer expenditures from the Water expenditure pool to reflect amounts funded by Water bonds subject to the performance audit:

**Table 4.4.8**  
**Water Bond-Funded Expenditures by Expenditure Classification**  
**(\$000)**

Expenditure Classification	2016 Series C	2017 Series C	Total
<b>Labor-related and consultants</b>			
Labor-related	\$ 15,069	\$ 16,039	\$ 31,108
Consultants	21,383	26,587	47,970
<b>Subtotal Labor-related and consultants</b>	<b>36,452</b>	<b>42,626</b>	<b>79,078</b>
Construction contracts	142,746	31,733	174,479
<b>Subtotal labor-related, consultants, and construction contracts</b>	<b>179,198</b>	<b>74,359</b>	<b>253,557</b>
<b>Other expenditures</b>			
Land acquisition	4,962	-	4,962
Fees, licenses, and permits	8,392	146	8,538
Construction materials	672	97	769
Other allocations	-	-	-
Legal and related	533	-	533
Commercial paper related	-	-	-
Intra-CCSF charges	2,923	66	2,989
Habitat preserve	12,000	-	12,000
All other	326	913	1,239
<b>Subtotal other expenditures</b>	<b>29,808</b>	<b>1,222</b>	<b>31,030</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 209,006</b>	<b>\$ 75,581</b>	<b>\$ 284,587</b>
Transfers from 2006A and 2009A	46,691	-	46,691

Source: SFPUC General Ledger

The amounts in Table 4.4.3 for Water 2017 Series C bonds do not reconcile directly to specific expenditures recorded in the general ledger, because funding sources could change during the middle of a month. Therefore, identifying expenditures to specific funding sources is impracticable.

The first expenditures funded by these bonds were \$46.7 million of transfers of expenditures originally funded by Water 2006 Series A and 2009 Series A bonds. The proceeds from these bond series were deemed to be substantially expended by June 30, 2008, and June 30, 2010, respectively. SFPUC was also required to establish a Habitat Preservation Reserve Fund, of which \$12 million was funded by Water 2016 Series C bond proceeds.

The following table summarizes Water bond-funded expenditures by expenditure classification as a percentage of total expenditures:

**Table 4.4.9**  
**Water Bond-Funded Expenditures by Expenditure Classification**  
**as a Percentage of Total Expenditures**

Expenditure Classification	2016 Series C	2017 Series C	Total
Labor-related and consultants			
Labor-related	7.21%	21.22%	10.93%
Consultants	10.23	35.18	16.86
Subtotal Labor-related and consultants	17.44	56.40	27.79
Construction contracts	68.30	41.99	61.31
Subtotal labor-related, consultants, and construction contracts	85.74	98.38	89.10
Other expenditures			
Land acquisition	2.37	-	1.74
Fees, licenses, and permits	4.02	0.19	3.00
Construction materials	0.32	0.13	0.27
Other allocations	-	-	-
Legal and related	0.26	-	0.19
Commercial paper related	-	-	-
Intra-CCSF charges	1.4	0.09	1.05
Habitat preserve	5.74	-	4.22
All other	0.13	1.21	0.44
Subtotal other expenditures	14.26	1.62	11.10
<b>TOTAL EXPENDITURES</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Source: SFPUC General Ledger

The high percentage of construction contract costs funded by Water 2016 Series C bonds reflects that such expenditures were made during the latter stages of the WSIP. Total proceeds from Water 2016 Series C were expended on Hetch Water projects, which were started later than WSIP projects, and accordingly would be expected to have a lower percentage of construction costs.



**Table 4.4.10**  
**Power Bond-Funded Expenditures**  
**by Expenditure Classification**

Expenditure Classification	2015 Series A (\$000)	% Of Total
Labor-related and consultants		
Labor-related	\$ 4,227	14.76%
Consultants	9,449	32.99
Subtotal Labor-related and consultants	13,676	47.75
Construction contracts	14,731	51.43
Subtotal labor-related, consultants, and construction contracts	28,407	99.18
Other expenditures		
Land acquisition	-	-
Fees, licenses, and permits	-	-
Construction materials	17	0.06
Other allocations	-	-
Legal and related	-	-
Commercial paper related	-	-
Intra-CCSF charges	9	0.03
All other	208	0.73
Subtotal other expenditures	234	0.82
<b>TOTAL EXPENDITURES</b>	<b>\$ 28,641</b>	<b>100.00%</b>

Source: SFPUC General Ledger

We note that labor-related, consultant and construction expenditures were more than 99% of total bond-funded expenditures. The relatively high percentage of labor-related and consultant expenditures to total expenditures reflects the early phases of the power bond-funded projects.

### Internal Controls Significant to the Audit Objectives

GAGAS requires the identification and evaluation of internal controls that are significant to the audit objectives. The City uses the *COSO Internal Control – Integrated Framework* (“COSO Framework”) as its internal control framework,<sup>4</sup> an acceptable framework under GAGAS for our consideration of internal control.<sup>5</sup> We therefore used the COSO Framework as a benchmark to evaluate the SFPUC’s design and operating effectiveness of relevant internal controls.

The original COSO Framework was originally published in 1992 and updated in 2013. We applied the original 1992 COSO Framework to activities and transactions occurring until May 31, 2013, and the 2013 update to activities and transactions after that date. The five interrelated components of internal control

<sup>4</sup> City and County of San Francisco, Accounting Policies and Procedures Manual, August 2020 update, §1.7

<sup>5</sup> GAGAS July 2018 Revision, ¶8.130.

remained substantively the same between the 1992 original and 2013 update, and are:

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring (1992) or Monitoring Activities (2013)

### **City Requirement to Establish and Maintain Effective Internal Control Systems**

The City requires that all departments “...*establish and maintain effective internal control systems as an integral part of their management practices...*”<sup>6</sup> SFPUC establishes and maintains department-specific internal controls<sup>7</sup> and is required to comply with City-wide internal controls established by City offices, including but not limited to, the Controller, Contract Administration, City Attorney, and Labor Standards Enforcement. Implementation of COSO Framework guidance is also part of effective internal control.

<sup>6</sup> City and County of San Francisco, Accounting Policies and Procedures Manual, August 2020 update, §1.7.

<sup>7</sup> SFPUC Infrastructure Construction Management Procedures, Procedure No:001, Preparation and Control of Construction Management Procedures, June 7, 2019

## Identification of Internal Control Significant to the Audit Objectives

We identified the following elements of SFPUC’s system of internal controls to be significant to our audit objectives. We, therefore, evaluated these elements to the extent necessary to meet our performance audit objectives:

- Control Environment
  - Design and implementation of policies and procedures to promote ethical behavior
  - “Tone From the Top” – behavior of senior management having a pervasive impact on internal control
- Control Activities
  - Contractor/consultant/vendor selection, including bid advertisement, acceptance and evaluation, and contract award procedures
  - Project cost control
  - Claims and change order control process
  - Allocation of program management costs to projects
  - Assignment of project costs to bond series

## Material Weakness Identified by Other Auditors

GAGAS requires auditors to consider findings from prior audit projects as part of performance audit risk assessment procedures and their effect on planned performance audit procedures.

The United States Attorney in San Francisco announced on July 17, 2023, that a Federal jury convicted SFPUC’s former General manager (GM) of multiple felonies. Relevant convictions include one count of conspiracy to commit honest services wire fraud and one count of honest services wire fraud. The former GM resigned from the SFPUC in November 2020 upon his indictment on charges for which he was convicted.

Evidence presented at trial showed, among other things, that the former GM “...had access to confidential information about city contract bidding processes, and the ability to influence the awarding of some city contracts...”<sup>8</sup> The city contracts referred to in the United States Attorney’s announcement were specifically SFPUC contracts.

The former GM’s conviction for such conduct on any SFPUC contract is deemed to be a material weakness relevant to our performance audit, as the former GM did not demonstrate ethical behavior and management integrity, a key component of the control environment. The CEO (in this case, the GM) of any organization individually often sets its ethical tone.<sup>9</sup> The ethical tone set by the former GM increased the risk of waste and abuse during his time as AGM of Infrastructure and later, GM.

All contracts awarded between June 2003 (the earliest date of expenditures subject to RBOC oversight) to November 2020 were under the control of the former AGM of Infrastructure/GM. Also, expenditures on these contracts occurred after November 2020.

<sup>8</sup> <https://www.justice.gov/usao-ndca/pr/jury-convicts-former-san-francisco-public-utilities-commission-general-manager-0>.

<sup>9</sup> Committee of Sponsoring Organizations of the Treadway Commission; *Internal Control – Integrated Framework: Framework*; September 1992, page 20.

## Evaluation of SFPUC Infrastructure

SFPUC's Infrastructure Division is responsible for various aspects of the capital process, including but not limited to engineering & design, environmental compliance, project & construction management, and cost control functions.

### SFPUC Infrastructure Division Procedures Manual

The Infrastructure Division provided us with current Project Design ("PD"), Project Management ("PM"), and Construction Management ("CM") procedures. We evaluated certain procedures to understand their design and implementation by the Infrastructure Division staff.

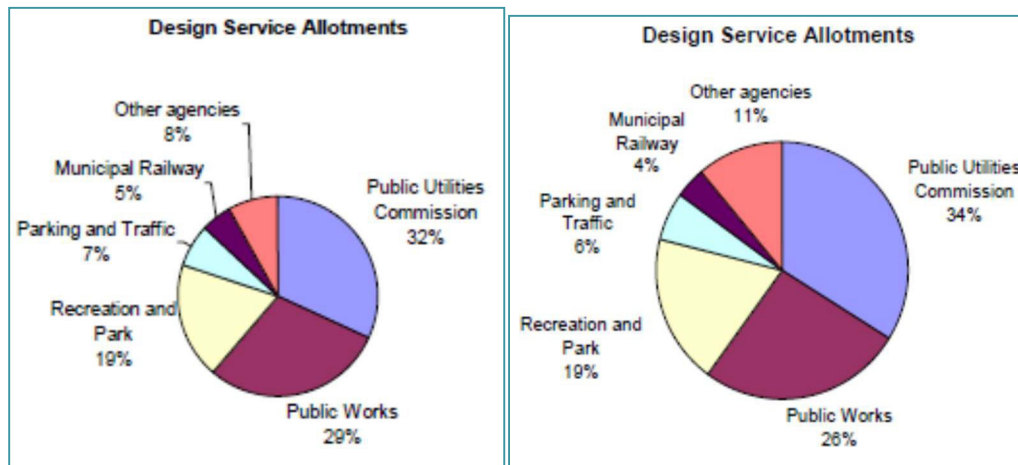
SFPUC's procedures are prepared to provide guidance and expectations for the various construction functions and the roles and responsibilities of consultants and SFPUC staff for the three Water, Wastewater, and Power Enterprises. PM and CM procedures are designed as a roadmap so that a consistent approach is implemented across the broader construction program.

The Audit Team evaluated project documentation contemporaneously prepared and memorialized throughout the construction process. Such documentation included but was not limited to risk management plans, pay applications, change orders, consultant monitoring reports, construction progress reports, lessons learned, and contract closeout packages for Wastewater, Water, and Power. The Audit Team analyzed these documents against the deliverables according to applicable PM and CM procedures.

### Services Performed by San Francisco Public Works

San Francisco Public Works' Hydraulic Section's ("HydraSection") activities of project management, design, engineering, and construction management are almost exclusively for SFPUC sewer-related work. Our conversations with SFPUC Infrastructure in November 2022 gave us the impression that HydraSection's functions have not changed significantly since 2002. According to SFPW's 2002-03 and 2005-06 annual reports, the last two annual reports that show engineering expenditures by benefitting City agency, show approximately 33% of total SFPW engineering expenditures benefitted SFPUC, which was higher than any other percentage, including work that benefitted SFPW. The following graphs in Figure 4.5.1 were obtained from SFPW annual reports:

*Figure 4.5.1  
San Francisco Public Works  
Design Service Allotments  
Fiscal Years 2002-03 and 2005-06*



Source: SFPW (fka SFDPW) Annual Reports

We note that the HydraSection remained at SFPW when all other Wastewater divisions and functions were transferred from SFPW to SFPUC.

Refer to Section 5 for a finding and recommendation to SFPUC related to the SFPW Hydraulic Section.

### Capital Projects Managed by Other City Agencies

During the risk assessment stage of the performance audit, we identified two Wastewater projects that are managed by the San Francisco Municipal Transportation Agency (“SFMTA”): Van Ness BRT Sewer Improvement and L Taraval Sewer Improvement. SFPUC informed us that SFMTA is responsible for retaining project documentation since SFMTA is designated as the lead City agency.

SFPUC provided us with a written narrative describing SFPUC’s framework for its participation on capital projects managed by other City agencies. SFPUC also provided a response along with memorandums of understanding (“MOUs”) and the most recent pay application for both projects.

SFPUC is primarily involved during the initial phase of project development up to the point when the MOU is executed. During this time, SFPUC’s activities include assessing infrastructure assets, developing alternative construction solutions, and budget negotiations. SFPW is responsible for the planning, design, and engineering aspects of the project. After the MOU is executed and construction begins, SFPW performs ongoing engineering, inspection, and other construction management activities. SFPUC project managers perform oversight activities to ensure SFPW is delivering on the requirements that SFPUC negotiated with SFMTA.

## Wastewater, Water, and Power Competitive Bid Analysis

The Audit Team requested and received bid tabulation summaries for each project identified during the risk analysis. We combined contractor bidding information with the ending change order values and compared this total to the SFPUC's engineering estimate.

As a follow-up to the two projects with cost overruns, we received supplementary documentation and held discussions with the relevant SFPUC personnel to understand the driving force behind variances. Based on our follow-up evaluation, we did not have any reportable findings with these two cost variations. This information is summarized in the following table:

*Table 4.5.1  
Competitive Bid Analysis  
(\$000)*

SFPUC Enterprise	Winning Bid Value	Total Change Order Value	Total Project Value	Engineer's Estimate (EE)	Variance Total Project Value & EE
Wastewater	\$ 129,334	\$ 8,840	\$ 138,174	\$ 122,688	\$ (15,486)
Water	832,449	392,760	1,228,918	1,018,129	(207,110)
Power	11,225	1,695	12,640	10,420	(2,220)
<b>TOTAL</b>	<b>\$ 973,008</b>	<b>\$ 403,295</b>	<b>\$ 1,379,732</b>	<b>1,151,237</b>	<b>\$ (224,816)</b>

Refer to appendix 8.4 for competitive bids by project.

## Construction Manager / General Contractor

SFPUC adopted a Construction Manager / General Contractor ("CMGC") contracting method for the New Headworks Facility and Biosolids Digester projects. The contractor with the highest score was awarded the CMGC contract on each of these projects.

SFPUC used a panel of experienced in-house construction professionals to score each contractor based on their responses to the CMGC bid package. Panelists' raw scores are averaged and then weighted based on each category's maximum value. The Audit Team evaluated each of the panelists' score sheets and had no audit findings because of our evaluation. See appendix 8.4 for CMGC bids by project.

## Professional Services Contracts

The City's Office of Contract Administration ("OCA") promulgates the procurement policies and procedures for all professional services contracts for all City departments, including SFPUC. SFPUC has the authority to procure professional services directly; however, the resulting contract must go through all standard City approvals and be approved by OCA.

In the project planning phase, SFPUC project engineers are responsible for initiating Requests for Proposals ("RFP") according to the special or unique project requirements. The RFP document contains pertinent information such as the scope of work ("SOW"), required qualifications, and the criteria for scoring each bid received.

Unlike construction contract RFPs that are evaluated based on a competitive bidding process or a CMGC evaluation process, the evaluation process for professional services is designed based on each project's unique needs. Furthermore, the criteria and evaluator scoring process can also vary depending on the professional services solicited by an RFP.

In general, professional service RFPs contain two main reviews: minimum qualification and qualitative evaluation of a written proposal and an oral presentation. Each of these categories includes multiple subsections based on the RFP criteria. In addition to the minimum qualifications and qualitative evaluation, the RFP may contain other evaluation sections, such as community benefits and/or fee for services. The minimum qualifications review is a pass/fail evaluation performed by procurement specialists and technical experts. Scores assigned by the SFPUC evaluation panel are weighted based on the percentages assigned to each category. Written and oral categories are weighted more than other categories. The following table is a summary of the professional services contracts awarded by enterprise and project:

**Table 4.5.2**  
**Professional Services Contract Award Summary**

Professional Services Description	Agreement No. Awarded	Contract Not-to-Exceed Value (\$000)	Contract Duration	Total No. Bids Evaluated	PUC Enterprise	Project
HSIP Professional and Engineering Services	CS-296B	\$9,500	5 years	Evaluated: 6 Awarded: 5	Water	San Joaquin Pipeline Rehabilitation
HSIP Professional and Engineering Services	CS-296D	\$9,500	5 years	Evaluated: 6 Awarded: 5	Power	Moccasin Penstock Rehabilitation
Planning and Design Services	CS-249	\$21,000	10 years	Evaluated: 3 Awarded: 1	Water	Mountain Tunnel Improvement Project
HHWP Civil and Geotechnical Services	CS-943	\$7,000	6 years	Evaluated: 2 Awarded: 1	Water & Power	Mountain Tunnel Lining Rehabilitation
SSIP Program Management Services	CS-165	\$150,000	6 years	Evaluated: 3 Awarded: 1	Wastewater	All SSIP Projects
Tunnel Technical Advisory Services	PRO.0137C	\$200	4 years	Evaluated: 3 Awarded: 1	Wastewater	Folsom Area Stormwater Detention Project
Planning & Engineering Services	CS-235	\$80,000	10 years	Evaluated: 1 Awarded: 1	Wastewater	SEWPCP Biosolids Digester Facilities
System Integration and Support Services – Related to Project Controls	CS-224A CS-224B	\$4,500 \$4,500	6 years	Evaluated: 2 Awarded: 2	All Three Enterprises	All Construction Projects

During our analysis of the scoring and evaluation process, we noted that the winning bid was primarily determined by the score received for the written and oral categories. Other categories, with weightings less than the written and oral categories, did not materially affect the award's outcome.

The planning & engineering services RFP for the Biosolids Digester Facilities ("BDF") project received only one qualified bidder. SFPUC determined to award the contract, despite only receiving one qualified bid, because the qualified bidder had the unique project experience required, including the unique experience from the sub-consultants included within their bid. We analyzed the evaluation process and did not have any audit findings because of this analysis.

SFPUC did not obtain written confirmations on impartiality and conflicts of interest from all individuals

involved in the procurement of the two System Integration and Support Services – Related to Project Controls contracts. Refer to Finding #1 in Section 5 for a finding related to the procurement of certain systems integration and support services. Prevailing Wage Compliance

The City's Office of Labor Standards Enforcement (“OLSE”) is responsible, among other things, for monitoring and enforcing prevailing wage compliance on all City construction contracts, including, but not limited to, SFPUC, SFPW, SFMTA, San Francisco International Airport and Port of San Francisco. We obtained an understanding of OLSE activities to monitor City-wide prevailing wage compliance and related follow-up on potential non-compliance. We also performed tests of OLSE's monitoring and follow-up activities. Table 4.5.3 summarizes prevailing wage restitution resulting from OLSE's enforcement efforts for Fiscal Years 2018-19 through 2020-21.

**Table 4.5.3**  
**Prevailing Wage Restitutions Recovered by OLSE**  
**(\$000)**

Fiscal Year	Prevailing Wage Restitutions	Total Restitutions	Prevailing Wage as a Percent of Total Restitutions
2018-19	\$ 2,334	\$ 13,349	17.5%
2019-20	1,706	13,796	12.4%
2020-21	656	10,053	6.5%
<b>TOTAL</b>	<b>\$ 4,696</b>	<b>\$ 37,198</b>	<b>12.6%</b>

*Source: OLSE Annual Reports*

The City-wide \$4.7 million of restitution for prevailing wage non-compliance during the three-year year period ended June 30, 2021, is deemed to be insignificant when considering that restitution includes numerous SFPUC, SFPW, San Francisco International Airport, and Port of San Francisco, among other projects, that are not subject to RBOC oversight.



## Accounting for Expenditures

### Implementation of Accounting for Expenditures

Water primarily used Proposition A and Proposition E funds (which were deemed fungible with each other) to accumulate all project expenditures funded by bonds and other specific funding sources. Periodic summary journal entries transferred the costs incurred by bond series, project, and account from the two fungible funds to the ultimate funding sources.

Wastewater implemented different approaches from Water and Power in documenting how costs are ultimately assigned to bond funding sources. Wastewater's use of "funds" in the general ledger is different than what is used by Water. Expenditures by each project are summarized, analyzed, and then assigned to the eventual bond or other funding sources. These analyses are not reflected in Excel spreadsheet files, and not recorded in the general ledger.

### Matching Specific Debt-Funded Expenditures to Funding Sources

Matching specific expenditures to ultimate funding sources is a multi-step process. Specific expenditures must be compared to total expenditures by each project by period to determine the project's ultimate funding source(s).

*Table 4.6.1  
Water Expenditures by Funding Source  
(\$000)*

Water Projects	2016 Series C	2017 Series C	Total
Cherry Dam Outlet Works	\$ -	\$ 3,897	\$ 3,897
Hetch Hetchy Facilities New Const.	-	9,741	9,741
Hetch Hetchy Facilities Upgrades	-	5,330	5,330
Mtn Tunnel Inspection & Repairs	-	5,458	5,458
Mtn Tunnel Access/Ad Improvement	-	4,399	4,399
San Joaquin Pipeline Rehab	-	15,109	15,109
Lower Cherry Aqueduct	-	7,530	7,530
Mtn Tunnel Access/Ad Imp	-	3,631	3,631
Mtn Tunnel Lining	-	3,072	3,072
BDPL Reliability Upgrade –Tunnel	81,725	-	81,725
BDPL Reliability –Pipeline	42,027	-	42,027
HTWTP Long-Term Improvements	33,505	-	33,505
Calaveras Dam Replacement	22,222	-	22,222
Alameda Siphon #4	19,471	-	19,471
Habitat Reserve Program	19,104	-	19,401
Regional Ground Water Storage	13,501	-	13,501
Bond/Commercial Paper Expense	8,607	-	8,607
All Other Projects	15,532	16,189	31,721
<b>TOTAL</b>	<b>\$ 255,694</b>	<b>\$ 74,356</b>	<b>\$ 330,347</b>

Source: 2016C - Green Bond Report; 2017C - SFPUC General Ledger.

**Table 4.6.2**  
**Wastewater Expenditures by Funding Source**  
**\$(000)**

Wastewater Projects	2018 Series A	2018 Series C	2021 Series A	Total
Collection System Improvement	\$ 37,584	\$ 28,560	\$ 30,796	\$ 96,940
Central Bayside System Improvement	9,029	838	633	10,500
Biosolids Digester	55,960	79,104	150,495	285,559
Stormwater Management	7,283	3,565	12,342	23,190
Flood Resilience	268	-	2,582	2,850
Northshore To Channel Force Main	3,277	974	-	4,251
Program Wide Management	43,382	4,042	14,874	62,298
Treatment Plant Improvement Projects	83,182	53,637	80,813	217,632
Urban Watershed Assessment	1,052	-	22	1,074
<b>TOTAL</b>	<b>\$ 241,017</b>	<b>\$ 170,720</b>	<b>\$ 292,557</b>	<b>\$ 704,294</b>
Number of months in the period	20	15	13	48

Source: 2018 A & C - Green Bond Report; 2021A - SFPUC General Ledger

**Table 4.6.3**  
**Power Expenditures by Funding Source**  
**(\$000)**

Power Projects	2015 Series A
Holm Powerhouse Refurbishment & Kirkwood Powerhouse Oil Containment	\$ 12,928
Mountain Tunnel Interim Repairs – 2017 & 2018	10,847
Kirkwood Penstock Short-Term Risk Reduction Measures	1,790
Moccasin Penstock Rehabilitation	2,232
All Other Projects	844
<b>TOTAL</b>	<b>\$ 28,641</b>

Source: Green Bond Report

### Labor, Benefits, and Related Overhead Expenditures

We took an overall approach to test labor and benefits because of the labor detail information available. We reconciled 100% of SFPUC labor details and selected SFPW labor details for fiscal years 2016-17 through 2020-21 to the payroll general ledger entries. Preliminary differences were deemed insignificant and not investigated.

We performed computer matching of pay rates by job classification and benefits (medical and dental) to published pay and benefit rates. We also calculated and evaluated the reasonableness of the employer

retirement contributions and payroll taxes. Significant preliminary differences were explained to our satisfaction.

We were provided with copies of journal entries to support entries to support all Wastewater expenditures. These entries were provided by fiscal year and transaction date, starting in fiscal year 2017-18. Transactions for fiscal years 2009-10 through 2016-17 did not have transaction dates. Also, transactions funded by commercial paper were assigned to commercial paper did not have their funding sources changed to the ultimate funding source when commercial paper was defeased by bonds.

Accordingly, to ensure that we included at least all Wastewater expenditures subject to the performance audit, our summarization includes expenditures funded by bonds other than those subject to the performance audit. The following table summarizes, by auditor-selected periods, Wastewater bond-funded labor-related expenditures by expenditure classification for the FAMIS sub-funds.

*Table 4.6.4  
Direct Labor, Benefits and Overhead  
Wastewater Revenue Bonds  
(\$000)*

Expenditure Classification	NOV2016 - Jun 2018	Jul 2018 - Sep 2019	Oct 2019 - Oct 2020	Total
Direct labor	\$ 17,716	\$ 13,618	\$ 14,013	\$ 45,347
Benefits on direct labor	6,701	5,353	5,829	17,883
Subtotal direct labor and benefits	24,417	18,971	19,842	63,230
Overhead	24,199	28,832	18,571	71,602
<b>TOTAL</b>	<b>\$ 48,616</b>	<b>\$ 47,803</b>	<b>\$ 38,413</b>	<b>\$ 134,832</b>
Number of months in the period	20	15	13	48

Source: SFPUC General Ledger.

The following summarizes labor, benefits, and overhead for the Water bond series subject to our performance audit:

*Table 4.6.5  
Direct Labor, Benefits, and Overhead  
Water Revenue Bonds  
(\$000)*

Expenditure Classification	2016 Series C	2017 Series C	Total
Direct labor	\$ 5,768	\$ 6,570	\$ 12,338
Benefits on direct labor	2,352	3,026	5,378
Subtotal direct labor and benefits	8,120	9,596	17,716
Overhead	6,949	6,443	13,392
<b>TOTAL</b>	<b>\$ 15,069</b>	<b>\$ 16,039</b>	<b>\$ 31,108</b>

Source: SFPUC General Ledger.

The following summarizes labor, benefits, and overhead for the Power bond series subject to our performance audit:

*Table 4.6.6  
Direct Labor, Benefits, and Overhead  
Power Revenue Bonds  
(\$000)*

Expenditure Classification	2015 Series A	
Direct labor	\$	1,707
Benefits on direct labor		835
Subtotal direct labor and benefits		2,542
Overhead		1,685
<b>TOTAL</b>	<b>\$</b>	<b>4,227</b>

### Labor-Related Expenditures by City Department

From July 1, 2013, to June 30, 2021, 97.2% of total labor, benefits, and overhead were charged by SFPUC and SFPW to projects funded by all bonds subject to RBOC oversight. The remaining 2.8% charged by all other City departments and agencies is deemed insignificant.

Table 4.6.6 summarizes total labor, benefits, and overhead dollars by City department or agency funded by bonds subject to RBOC oversight from July 1, 2013, to June 30, 2021:

*Table 4.6.7  
Comparative Labor, Benefits, and Overhead Dollars  
All Bonds Subject to RBOC Oversight  
July 2013 to June 2021  
(\$000)*

Classification	SFPUC	SFPW	Total SFPUC and SFPW	Other	Total
Direct labor and benefits	\$ 225,718	\$ 73,220	\$ 298,938	\$ 8,483	\$ 307,421
Overhead	174,389	74,662	249,051	7,203	256,254
<b>TOTAL</b>	<b>\$ 400,107</b>	<b>\$ 147,882</b>	<b>\$ 547,989</b>	<b>\$ 15,686</b>	<b>\$ 563,675</b>
<b>TOTAL as a %</b>	<b>70.99%</b>	<b>26.24%</b>	<b>97.22%</b>	<b>2.78%</b>	<b>100.00%</b>

Table 4.6.7 summarizes overhead as a percentage of direct labor and benefit dollars by City department or agency funded by bonds subject to RBOC oversight from July 1, 2013, to June 30, 2021:

*Table 4.6.8  
Comparative Overhead as a  
Percentage of Direct Labor and Benefits  
All Bonds Subject to RBOC Oversight  
July 2013 to June 2021*

	SFPUC	SFPW	Other
Overhead as a percentage of labor and benefits	<b>77.35%</b>	<b>101.97%</b>	<b>84.91%</b>
Difference using SFPUC's overhead rate as the benchmark	<b>N/A</b>	<b>24.62%</b>	<b>7.56%</b>

From July 1, 2013, to June 30, 2021, SFPW's overhead charged to all projects subject to RBOC oversight was 24.62% higher than SFPUC's. Using SFPUC's overhead rates in place of SFPW's reduces bond-funded expenditures, subject to RBOC oversight, by \$18.0 million. As shown above, direct labor, benefits and overhead charged by other departments was insignificant, so the 7.56% overhead rate difference was not investigated further.

### **SFPW Labor Through June 30, 2017**

SFPW labor through June 30, 2017, was controlled only at the funding level, not at the project level. Accordingly, SFPUC is not able to assert that SFPW labor through June 30, 2017, was charged to the correct project. SFPUC informed us that this pervasive system-level internal control deficiency was corrected upon the implementation of PeopleSoft on July 1, 2017.

## 5. FINDINGS APPLICABLE TO ALL BOND SERIES

We have two findings applicable to all bond series, not just the six-bond series subjected to Phase 2 performance audit procedures. One finding results from a pervasive internal control deficiency related to confidentiality and conflicts of interest during procurement solicitations. The second finding relates to the effects of not transferring SFPW’s Hydraulics Section to SFPUC along with the rest of what is now known as the Wastewater Enterprise, even though this Section almost exclusively provides sewer-related project management, design, engineering, and construction management services.

### Finding No. 1: Non-Completion of Impartiality and Confidentiality Statements by All Individuals Associated with Procurements

<p><b>Summary</b></p>	<p>SFPUC did not comply with COSO Framework guidance and City preferred procurement practices by not obtaining signed impartiality and conflict of interest statements from <u>all</u> individuals participating in procurement solicitations, including those performing minimum qualifications review, creating a heightened risk for impropriety. This pervasive internal control deficiency existed during the procurement process for a contract awarded to an entity controlled by an individual who had a joint investment with the former SFPUC AGM-Infrastructure (and later, SFPUC General Manager). The circumstances surrounding the timing of the sale of the individual’s share of the investment to the former AGM-Infrastructure increased the risk environment for waste and abuse with respect to this contract award. We questioned a total of \$15.36 million of expenditures.</p>
<p><b>Criteria</b></p>	<p>The City requires all departments to establish and maintain effective internal control systems and uses the COSO Framework as its internal control framework. The guidance in the COSO Framework is therefore an appropriate benchmark for evaluating SFPUC’s establishment and maintenance of effective internal control systems. Further, the COSO Framework should be applied at various levels of the organizational structure from functional to entity-wide level across the 5 components and 17 underlining principles. Absent any citywide policy, SFPUC as an organization has the responsibility to establish and maintain effective internal control systems for its organization.</p> <p>Specifically, the operating controls over the <i>control environment</i> and <i>monitoring activities</i> are the relevant criterion identified under the COSO Framework.</p> <p>COSO Framework Evaluation Tools<sup>10</sup> for the control environment, page 5, includes a section on the “[...]existence and implementation of codes of conduct and other policies regarding acceptable business practice, conflicts of interest, and ethical and moral behavior...” The evaluation of the codes of conduct and other policies include, but not limited to, consideration of whether they are:</p> <ul style="list-style-type: none"> <li>• Comprehensive; and</li> <li>• Periodically acknowledged by all employees.</li> </ul>

<sup>10</sup> Committee of Sponsoring Organizations of the Treadway Commission; *Internal Control – Integrated Framework: Evaluation Tools*; September 1992, page 5.

Also, the COSO Framework Evaluation Tools for monitoring activities states that, “internal control monitoring should assess the quality of performance over time and ensure that the findings of audits and other reviews are promptly resolved...including those showing deficiencies and recommendations reported by auditors and others who evaluate agencies’ operations.

The SFPUC Statement of Incompatible Activities, Section III. A. 3. states in part that “[N]o officer or employee may knowingly provide selective assistance (i.e., assistance that is not generally available to all competitors) to individuals or entities in a manner that confers a competitive advantage on a bidder or proposer who is competing for a City contract...” We consider this part of the existence and comprehensiveness of relevant policies and procedures.

The City Controller’s Office developed a City Solicitation/Contract Participation Acknowledgement form (“Acknowledgement”, and since superseded by the Impartiality/Confidentiality Statement “I/CS”). The Acknowledgement or I/CS must be completed and signed by all individuals associated with procurement, from the development of the solicitation to the evaluation and selection of vendors, consultants, or contractors. The Acknowledgement or I/CS requires the signer to acknowledge, among other things, that:

1. All information concerning the solicitation is of a highly confidential nature.
2. The evaluator must give each entity fair and independent consideration.
3. Although an evaluator may listen to the views of other participants, the comments and decisions must reflect the evaluator’s own impartial judgment on the entity’s proposal/bid.
4. The evaluator should not participate in the evaluation process if (s)he has any conflict of interest that would prevent an impartial judgment as to each entity.

SFPUC issued *Guidance for Obtaining Professional Services Agreements 9/2/09* (“Procurement Guidance”). Under this Procurement Guidance, the originator of the Request for Proposal “[r]eviews each proposal package for responsiveness to the RFP requirements and specifically whether consultant meets the qualifications criteria...”

This Procurement Guidance also requires evaluation panelists to complete conflict of interest statements, but no such requirement exists for individuals evaluating proposal packages for responsiveness to RFP requirements. Impartiality and lack of conflict of interest is as important for the individuals evaluating proposal packages for responsiveness to the RFP requirements as they are for panelists.

GAGAS paragraph 8.121b states in part that an example of waste, depending on the facts and circumstances, includes:

*“[m]aking procurement or vendor selections that are contrary to existing policies...”*

GAGAS paragraph 8.123c states in part that an example of abuse, depending on the facts and circumstances, includes:

*“[m]isusing the official’s position for personal gain (including actions that could be perceived by an objective third party with knowledge of the relevant information as improperly benefiting an official’s personal financial interests or those of an immediate or close family member...”*

<p><b>Observations</b></p>	<p>SFPUC neither required nor obtained completed Acknowledgement or I/CS forms from SFPUC staff who evaluated proposal packages for responsiveness to the RFP requirements and specifically whether consultants met the qualifications criteria. We specifically observed the non-completion of I/CS forms by the qualitative review panel during the evaluation of the January-August 2012 RFP process that resulted in contract CS-224A awarded to mlok Consulting, Inc. (“mlok”) and contract CS-224B awarded to Westland Management Solutions, Inc. We inspected an Acknowledgement form signed by an SFPUC employee on September 8, 2011, so the existence of the Acknowledgement form was known within SFPUC no later than this date. We also observed that the president of mlok had a joint investment with the former SFPUC AGM-Infrastructure from December 6, 2002, to December 30, 2011. The president of mlok sold their share of the investment to the former SFPUC AGM- Infrastructure 21 days before the RFP for contract C-224A was issued on January 20, 2012. The former AGM-Infrastructure, who was GM from September 2012 to November 2020, was convicted of felonies in July 2023 for, among other things, having the ability to influence the awarding of some city contracts. The Audit Team has been informed that the City Attorney is conducting confidential investigations of SFPUC, which could include an evaluation of contract C-224A.</p> <p>SFPUC informed the Audit Team that procedures are undergoing revisions to require the use of evaluation panels on all procurements above \$500,000. The revised procedures also allow SFPUC divisions to use evaluation panels on procurements of less than \$500,000.</p>
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<p><b>Effect</b></p>	<p>The following table summarizes CS-224A and CS-224B contract expenditures subject to RBOC oversight from fiscal year 2012-13 to 2020-21:</p> <table border="1" data-bbox="607 323 1333 464"> <thead> <tr> <th>Contract Number</th> <th>Consultant</th> <th>Expenditures (\$000)</th> </tr> </thead> <tbody> <tr> <td>CS-224A</td> <td>mlok Consulting, Inc.</td> <td>\$ 7,100</td> </tr> <tr> <td>CS-224B</td> <td>Westland Management Solutions, Inc.</td> <td>8,260</td> </tr> <tr> <td colspan="2"><b>Total Expenditures:</b></td> <td><b>\$ 15,360</b></td> </tr> </tbody> </table> <p>The amounts summarized above include expenditures funded by all bond series subject to RBOC oversight and exclude amounts funded by other sources not subject to RBOC oversight.</p> <p>SFPUC did not obtain adequate evidence that individuals evaluating proposal packages for responsiveness to the RFP requirements and specifically whether consultant met the qualifications criteria complied with SFPUC impartiality and conflict of interest requirements. This increased the risk environment for waste on contract CS-224A and CS-224B.</p> <p>The combination of not requiring acknowledgement of impartiality and conflict of interest policies, and the facts and circumstances of the mlok President's joint ownership of property with the former SFPUC AGM Infrastructure, and the related sale of her share of the property, resulted in an increased risk environment for abuse as well as waste on contract CS-224A.</p> <p>Because of the increased risk environment for waste and abuse, we question whether the \$15.36 million of expenditures was a proper use of bond proceeds.</p>	Contract Number	Consultant	Expenditures (\$000)	CS-224A	mlok Consulting, Inc.	\$ 7,100	CS-224B	Westland Management Solutions, Inc.	8,260	<b>Total Expenditures:</b>		<b>\$ 15,360</b>
Contract Number	Consultant	Expenditures (\$000)											
CS-224A	mlok Consulting, Inc.	\$ 7,100											
CS-224B	Westland Management Solutions, Inc.	8,260											
<b>Total Expenditures:</b>		<b>\$ 15,360</b>											
<p><b>Cause</b></p>	<p>SFPUC not requiring the Acknowledgement or I/CS forms from individuals evaluating proposal packages for responsiveness to the RFP requirements is a pervasive internal control deficiency, as periodic acknowledgements of conflict of interest and other relevant policies is a specific component of the COSO Framework control environment.</p> <p>SFPUC asserts that then-extant City policy did not require the completion of Acknowledgement or I/CS from individuals evaluating proposal packages for responsiveness to the RFP requirements. Impartiality and lack of conflict of interest of the individuals evaluating proposal packages for responsiveness to the RFP requirements is important enough that a specific City-wide policy including such individuals as being subject to completion of Acknowledgement or I/CS forms should not be necessary for SFPUC to have included and implemented such a requirement for completion.</p>												
<p><b>Recommendations</b></p>	<p>SFPUC should follow the guidance in the COSO Framework for control environment, and monitoring controls with the following:</p> <ul style="list-style-type: none"> <li>• require the completion of I/CS forms on all procurements above \$500,000, and for those procurements where SFPUC deems appropriate to further strengthen its control environment.</li> <li>• request all publicly available information from the City Attorney on its investigations of SFPUC procurement practices and periodically report such publicly available information to the RBOC, where procurement practices impact revenue bond expenditures to further strengthen monitoring activities.</li> </ul>												

## Finding No. 2: SFPUC Should Quantify and Report on Overhead Rates Charged for SFPW Sewer Engineering Activities

<b>Summary</b>	<p>SFPUC is not quantifying or reporting the monetary impact of SFPW’s overhead rates on total sewer engineering direct labor and benefits to the RBOC. The RBOC accordingly cannot discharge its oversight responsibilities on these additional expenditures.</p> <p>Since future expenditures subject to RBOC oversight on Wastewater projects are expected to be in the billions of dollars, it is expected that substantial SFPW sewer engineering direct labor, benefits and related overhead will be included in such expenditures.</p>
<b>Criteria</b>	<p>San Francisco Administration Code Section 5A.31(c)(5), states in part that the purpose of the RBOC includes:</p> <p style="padding-left: 40px;"><i>“Reviewing efforts by the City to maximize bond proceeds by implementing cost- saving measures, including, but not limited to, all of the following: (i) mechanisms designed to reduce the costs of professional, consulting and similar fees and expenses related to site preparation and project design...”</i></p> <p>Since the legislation states “...including, but not limited to...”, we interpret this provision to include mechanisms to reduce the costs of all bond-funded expenditures.</p>
<b>Observation</b>	<p>SFPUC is not quantifying or reporting the monetary impact of SFPW’s overhead rates on total sewer engineering direct labor and benefits. We recognize that SFPW, as a government fund department, has a different overhead rate recovery structure than SFPUC, a proprietary/enterprise fund department.</p> <p>SFPUC, as a matter of policy and in accordance with an MOU, gives SFPW the right of first refusal to provide sewer engineering services on SFPUC projects if SFPUC has the capability, but not capacity, to provide such services.</p> <p>This observation does not apply to any additional street repair or replacement expenditures made necessary by SFPUC water, power and/or sewer projects.</p> <p>The following shows the allocation of SFPW’s engineering expenditures spent on department projects in fiscal years 2021 and 2022. Analysis based on publicly available data.</p> <ul style="list-style-type: none"> <li>• 32 to 34 percent on SFPUC projects</li> <li>• 26 to 29 percent on SFPW projects</li> <li>• 19 percent on Parks and Recreation projects</li> <li>• 20 to 21 percent on all other City projects, with no department exceeding 11 percent.</li> </ul>
<b>Effect</b>	<p>The RBOC does not have adequate visibility of the financial impact of using SFPW sewer engineering services, and therefore cannot exercise proper oversight of these expenditures that are funded with revenue bonds. Specifically, SFPUC submitting project budgets to RBOC without quantifying these effects is not sufficient for RBOC to have adequate information on the mechanisms designed to reduce the costs of projects funded with revenue bond proceeds.</p> <p>Since future expenditures subject to RBOC oversight on Wastewater projects are expected to be in the billions of dollars, it is expected that substantial SFPW sewer engineering direct labor, benefits and related overhead will be included in such expenditures.</p>

<b>Cause</b>	SFPUC budgetary procedures do not include the requirement to communicate these fiscal effects of SFPW sewer engineering costs to RBOC.
<b>Recommendation</b>	SFPUC should coordinate with RBOC and SFPW to quantify, evaluate, and report on the monetary impacts of SFPW's overhead rates charged on total direct labor and benefit expenditures subject to RBOC oversight, so that the RBOC can exercise proper oversight over such overhead expenditures.

## 6. CONCLUSION

We met our audit objectives for the Phase 2 performance audit of capital expenditures funded by proceeds from public utility revenue bonds subject to RBOC oversight. Except as described in Section 5 of this report, we found no instances in which expenses were not adequately supported or were not assigned or allocated to the correct project(s) within a bond series.

We also found that a previously reported material weakness in internal control over financial reporting was also a deficiency in internal control significant to our audit objectives over the allowability of expenditures, and assignment or allocation of expenditures to project(s) within a bond series. Even though SFPUC has taken steps to rectify the internal control deficiencies identified in Finding 1, SFPUC determined that it was impracticable to rectify the deficiencies on a retrospective basis back to fiscal 2010-11.

## 7. FOLLOW-UP ON PREVIOUSLY ISSUED FINDINGS

GAGAS requires that auditors follow up on the findings of previous audit recommendations. This section includes our recommendations from Phase 1 of our performance audit and our observations on the implementation of our recommendations.

CSA informed us that it is responsible for follow-up on previously issued findings and will follow up with SFPUC at the appropriate time.

### Follow-Up on Phase 1, Finding 1

<p><b>Phase 1 Report: Finding 1 Recommendation</b></p>	<p>The SFPUC should coordinate with RBOC to provide a comprehensive report of project expenditures by each funding source to facilitate compliance with Administrative Code Sections 5A.30-5A.36:</p> <ul style="list-style-type: none"> <li>a. revenue bonds by bond series,</li> <li>b. federal and state grants and loans,</li> <li>c. commercial paper to be refinanced, and</li> <li>d. other funding sources.</li> </ul> <p>The amounts should reconcile to the Estimated Uses of Bond Proceeds included in each bond series' Official Statement.</p> <p>In addition, SFPUC should coordinate with RBOC to provide a report showing the uses of bond proceeds for each bond series, including:</p> <ul style="list-style-type: none"> <li>a. amounts deposited into capital project funds,</li> <li>b. commercial paper defeased,</li> <li>c. Debt Service Reserve (DSR) releases (included with either the original bond series or as separately identified bond proceeds),</li> <li>d. investment earnings on unexpended bond proceeds used for capital expenditures, and</li> <li>e. other uses of bond proceeds.</li> </ul>
<p><b>Current Status</b></p>	<p>SFPUC’s reporting of expenditures by project and funding source does not include funding sources not subject to RBOC oversight, whereas Infrastructure reports only total expenditures by project from all funding sources. Because Infrastructure reports total project expenditure amounts to RBOC, RBOC cannot discharge its responsibilities without a reconciliation of expenditures subject to RBOC oversight to total expenditures.</p> <p>We also observed the following during our follow-up on this prior recommendation:</p> <ul style="list-style-type: none"> <li>• Total available expenditures for multiple Water bond series do not include amounts used to defease commercial paper. This is inconsistent with other Water bond series and all Wastewater bond series, which include commercial paper defeasances in total available proceeds.</li> <li>• All Wastewater investment earnings on unexpended bond proceeds are included as one total amount, as are total investment earnings for Power 2015 Series A and B bonds. This is inconsistent with the Water bond series, which summarize investment earnings by bond series.</li> </ul>

<b>Current Recommendation</b>	SFPUC should ensure that annual reports provided to RBOC of expenditures by bond series include all funding sources. This information is crucial so the annual RBOC reports can be reconciled to other reports issued to the public that contain total expenditures by project regardless of funding source, and Green Bond reports that contain total expenditures by bond series and project.
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### Follow-Up on Phase 1, Finding 2

<b>Phase 1 Report: Finding 2 Recommendation</b>	SFPUC should comply with the existing PM Procedure, 6.02 Quality Assurance Audits, to perform Quality Assurance Audits during the four main phases of a project's lifecycle.
<b>Current Status</b>	<p>The implementation of this recommendation is in process, as the implementation cycle for this recommendation is multiple years. We have no further observations on the implementation to date of this recommendation.</p> <p>We note that the AGM Infrastructure updated the RBOC regarding steps to improve the QA audit function in September 2022 and May 2023. These steps included re-organizing the project controls group under the project management bureau to better align with other PM functions, and steps to replace the quality assurance manager position that was vacated in June 2022. Further, project management procedure 6.02, titled "Quality Assurance Audits," was revised to increase the AGM's latitude for prioritizing projects that require QA involvement, such as the project's size, type, or complexity.</p> <p>SFPUC performed four QA audits after the Phase 1 report, with more QA audits planned in the future months. Findings from these QA audits were categorized by the project management or engineering management processes. The responsible project managers are required to complete a corrective action plan ("CAR") describing the underlying cause, remedial (short-term) actions, and proposed corrective (long-term) actions taken related to each QA finding.</p>
<b>Current Recommendation</b>	SFPUC should continue its process to re-implement the QA audit function, including the evaluation of CARs as applicable.

## 8. APPENDIX A

### Previously Issued Reports Relevant to the Performance Audit

Report Date	Report Title	Prepared by
<b>December 23, 2021</b>	<i>Performance Audit of Select Revenue Bond Expenditures</i>	HKA Global, Inc. Yano Accountancy Corporation
<b>February 26, 2021</b>	<i>San Francisco Public Utilities Commission – Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards</i>	KPMG LLP
<b>October 22, 2015</b>	<i>Construction Management Services - RBOC Evaluation of Lessons Learned Water System Improvement Program (WSIP) Project CS-363 Final Report</i>	RW Block Consulting, Inc.
<b>May 9, 2013</b>	<i>Evaluation of the Water System Improvement Program (WSIP) Project CS-254</i>	RW Block Consulting, Inc.
<b>January 19, 2012</b>	<i>Review of the Independent Review Panel's Final Report dated December 28, 2011</i>	Professor William Ibbs
<b>December 28, 2011</b>	<i>Independent Review of the Water System Improvement Project (WSIP) Construction Management Program</i>	Gary Griggs, MSCE., PE, Panel Chair Glenn Singley, PE, Panel Member Don Russell, CCM., FCMAA, Panel Member Galyn Rippentrop, Panel Member
<b>December 10, 2009</b>	<i>Review of Sunset Reservoir - North Basin Project - Final Report to the Public Utilities Revenue Bond Oversight Committee</i>	Robert Kuo Consulting, RW Block Consulting, Lawrence Doyle
<b>November 21, 2007</b>	<i>Financial Review of Aspects of the Water System Improvement Program</i>	Robert Kuo Consulting, LLC with Lawrence Doyle, Shannon Gaffney Consulting, EPC Consultants, Inc.
<b>July 17, 2006</b>	<i>Review of Water System Improvement Program Expenditures Under SFPUC's Commercial Paper Program</i>	Robert Kuo Consulting, LLC & Lawrence Doyle

## Bonds Subject to RBOC Oversight

SFPUC Enterprise	Official Statement Proceeds (\$000)
Water and Hetchy Water	\$ 4,674,443
Wastewater	1,837,773
Power	195,761
<b>TOTAL</b>	<b>\$ 6,707,977</b>

	Water and Hetchy Water	Official Statement Proceeds (\$000)
	<b>Water</b>	
1	2006 Series A	\$ 459,223
2	2009 Series A	369,073
3	2009 Series B	377,778
4	2010 Series A	58,748
5	2010 Series B	364,757
6	2010 Series D	72,243
7	2010 Series E	300,446
8	2010 Series F	149,728
9	2010 Series G	288,252
10	2011 Series A	525,000
11	2011 Series C	33,772
12	2012 Series A	530,000
13	2012 Series B	15,750
14	2016 Series C	256,822
15	2017 Series A	125,765
16	2017 Series B	150,000
17	2020 Series A	180,000
18	2020 Series B	69,644
19	2020 Series C	94,988
	<b>Subtotal Original Issue</b>	<b>4,421,989</b>
	Debt Service Reserve Releases	99,709
	<b>Subtotal Water</b>	<b>\$ 4,521,698</b>
	<b>Hetchy Water</b>	
20	2011 Series B	27,710
21	2017 Series C	75,265
22	2020 Series D	49,770
	<b>Subtotal Hetchy Water</b>	<b>152,745</b>
	<b>Subtotal Water and Hetchy Water</b>	<b>\$ 4,674,443</b>

Source: Official Statements.

Proceeds at Issuance may not include all adjustments to the Official Statement amounts, investment earnings, or post-issuance debt service reserve releases.



	<b>Wastewater Enterprise</b>	<b>Official Statement Proceeds (\$000)</b>
23	2010 Series A	\$ 50,000
24	2010 Series B	165,929
25	2013 Series B	337,610
26	2016 Series A	258,563
27	2016 Series B	72,891
28	2018 Series A	241,013
29	2018 Series B	201,047
30	2018 Series C	170,720
31	2021 Series A	296,000
32	2021 Series B	44,000
	<b>Subtotal Wastewater</b>	<b>\$ 1,837,773</b>

Source: Official Statements.

Proceeds at Issuance may not include all adjustments to the Official Statement amounts, investment earnings, or post-issuance debt service reserve releases.

	<b>Power Enterprise</b>	<b>Official Statement Proceeds (\$000)</b>
33	2008 CREB	\$ 5,885
34	2011 QECB	8,217
35	2012 NCREB	3,711
36	2015 NCREB	2,933
37	2015 Series A	30,200
38	2015 Series B	7,100
39	2021 Series A	82,710
40	2021 Series B	55,005
	<b>Subtotal Power</b>	<b>\$ 195,761</b>

Source: Official Statements.

Proceeds at Issuance may not include all adjustments to the Official Statement amounts, investment earnings, or post-issuance debt service reserve releases.

## Phase 2 Bonds - Project Index

Table 8.3.1  
Wastewater 2018 A&C and 2021A Projects

Project	Program	Contract No.	FAMIS Project Code	PS Project Code
<b>Treatment Facilities</b>				
<b>Southeast Plant Improvements</b>				
Biosolids Digester Facilities Project – Planning & Engineering, Pre-Construction & Construction Services	SSIP Phase 1	CS-235 WW-647R	CWWSIPDP01	10015796
New Headworks Grit Replacement	SSIP Phase 1	CS-389	CWWSIPSE02	10015807
<b>Oceanside Plant (OSP) Improvements</b>				
Oceanside Pollution Control Plant Digester Gas Handling Utilization Upgrades	SSIP Phase 1	WW-639	CWWSIPTPOP03	10029737
<b>North Point Facility (NFP) Improvements</b>				
Northpoint Outfall Rehabilitation	SSIP Phase 1	WW-614R2	CWWSIPTPNP01	10026821
<b>Collection System</b>				
<b>Interceptors / Tunnels and Odor Control</b>				
Drumm & Jackson St. Sewer Improvements	SSIP Phase 1	WW-657R	CWWSIPCSSR09	10002689
<b>Interdepartmental Projects</b>				
Van Ness BRT Sewer Improvements	SSIP Phase 1	1289 (SFMTA)	CWWSIPCSSR04	10002664
Geary BRT Sewer Improvements	SSIP Phase 1	WW-674R	CWWSIPCSSR06	10002670
L Taraval Sewer Improvements	SSIP Phase 1	1308R (SFMTA)	CWWSIPCSSR13	10002776
<b>Pump Stations and Force Main Improvements</b>				
Mariposa Pump Station & Force Main	SSIP Phase 1	WW-667	CWWSIPCSPS03	10026828
Marin St. Sewer Replacement	SSIP Phase 1	WW-653	CWWSIPCSPS05	10002465
Griffith Pump Station Improvements	SSIP Phase 1	WW-651	CWWSIPCSPS06	10002485
<b>Combined Sewer Discharge, Transport/Storage Structures</b>				
Jackson, Griffith, & Pierce St. Sewer Discharge Rehabilitation & Backflow Prevention	SSIP Phase 1	WW-702R	CWWSIPCSCD04	10002344
Sansome, 5 <sup>th</sup> & 6 <sup>th</sup> North, & Division St., Sewer Discharge Rehabilitation & Backflow Prevention	SSIP Phase 1	WW-683R	CWWSIPCSCD05	10002378
<b>Stormwater Management</b>				
Sunset Blvd. Greenway Phase II Irving to Ulloa	SSIP Phase 1	WW-691	CWWSIPFCDB01	10026805
Lake Merced, Holloway Green St. Stormwater Imp.	SSIP Phase 1	WW-609R	CWWSIPFCDB03	10026807
Richmond, Baker Beach Green Streets Early Improvement	SSIP Phase 1	WW-627R	CWWSIPFCDB05	10026809
<b>Flood Resilience</b>				
Folsom Area Stormwater Detention Project -Tunnel Technical Advisory Panel Services	SSIP Phase 1	PRO.0137C	CWWSIPFCDB14	10026818
<b>SSIP Program Management</b>				
Program Wide Management Services	SSIP Phase 1	CS-165	CWWSIPPRPL01	10029732

**Table 8.3.2**  
**Water 2016C and 2017C Projects**

Projects	Program	Contract No.	FAMIS Project Code	PS Project Code
<b>Sunol Valley</b>				
Calaveras Dam Upgrade	WSIP Regional	WD-2551	CUW37401	10015317
Alameda Siphon No. 4	WSIP Regional	WD-2552	CUW35902	10015291
<b>Bay Division</b>				
BDPL Reliability Upgrade – Bay Tunnel	WSIP Regional	WD-2531	CUW36801	10015308
BDPL Reliability Upgrade – Pipeline No. 5 East Bay Reaches	WSIP Regional	WD-2541	CUW36802	10015309
<b>Peninsula</b>				
Harry Tracy Water Treatment Plant (HTWTP) Long-Term Improvements	WSIP Regional	WD-2596	CUW36701	10015306
<b>San Francisco Regional</b>				
Regional Ground Water Storage & Recovery	WSIP Regional	WD-2668	CUW30103	10015241
<b>Support Projects</b>				
Bioregional Habitat Restoration – San Antonio Creek	WSIP Regional	WD-2652	CUW38802	10015335
Mountain Tunnel Lining Rehabilitation	WSIP	CS-943 (Task 7)	CUH10002	10014067
<b>HHWP Renewal &amp; Replacement</b>				
San Joaquin Pipeline No. 1 In-line Inspection	R&R	CS-296B	CUH10001	10014066
<b>HCIP Water</b>				
Cherry Dam Outlet Works Rehabilitation	HCIP Water	HH-983	CUH10216	10014109
Moccasin Shops / Office Building & Materials Bins	HCIP Water	HH-982	CUH10214	10014107
Mountain Tunnel Access & Adit Improvement	HCIP Water	HH-981	CUH10219	10014112
Moccasin Control & Server Building	HCIP Water	HH-963R	CUH10202	10014095
<b>HCIP Joint</b>				
Lower Cherry Aqueduct Emergency Rehabilitation	HCIP Joint	HH-974E	CUH10003	10014068
Mountain Tunnel Inspection & Repair 2017	HCIP Joint	HH-986	CUH10220	10014113
Mountain Tunnel Inspection & Repair 2018	HCIP Joint	HH-991 CS-249	CUH10221	10014114

Power 2015A Projects	Program	Contract No.	FAMIS Project Code	PS Project Code
<b>HCIP Power</b>				
Holm Powerhouse Refurbishment & Kirkwood Powerhouse Oil Containment	HCIP Power	HH-989	CUH10102	10014075
Kirkwood Penstock Short-Term Risk Reduction Measures	HCIP Power	HH-988R	CUH10113	10014085
Moccasin Penstock Rehabilitation	HCIP Power	CS-296D	CUH10116	10014088

## Procurement Analysis

**Table 8.4.1**  
**Wastewater Projects Value Variance Analysis**  
**(\$000)**

Project	No. of Bids	Winning Bid Value	Total Change Order Value	Total Project Value	Engineer's Estimate (EE)	Variance Total Project Value & EE
SSIP Oceanside Pollution Control Plant Digester Gas Handling Utilization Upgrades	5	\$ 38,449	\$ 2,064	\$ 40,513	\$ 36,300	\$ (4,213)
Sansome, 5 <sup>th</sup> & 6 <sup>th</sup> North, & Division St., Sewer Discharge Rehabilitation & Backflow Prevention	3	\$ 4,907	\$ 1,705	\$ 6,612	\$ 5,036	\$ (1,576)
Jackson, Griffith, & Pierce St. Sewer Discharge Rehabilitation & Backflow Prevention	3	3,886	-	3,886	4,970	1,084
Mariposa Pump Station & Force Main	5	17,031	1,008	18,039	16,400	(1,639)
Geary Blvd. Sewer & Water Imp.	3	16,247	240	16,487	16,000	(487)
Griffith Pump Station Imp.	3	10,941	1,036	11,977	10,123	(1,854)
Northpoint Outfall Rehabilitation	2	12,486	419	12,905	10,300	(2,605)
Baker Beach Green Streets Early Imp.	4	7,122	1,209	8,331	6,961	(1,370)
Holloway Green St. Stormwater Imp.	2	5,592	288	5,880	5,797	(83)
Drumm & Jackson St. Sewer Imp.	3	5,241	477	5,718	4,810	(908)
Marin St. Sewer Replacement	4	4,860	139	4,999	3,700	(1,299)
Sunset Blvd. Greenway Phase II Irving to Ulloa (Stormwater)	2	2,572	255	2,827	2,291	(536)
<b>TOTAL</b>		<b>\$ 129,334</b>	<b>\$ 8,840</b>	<b>\$ 138,174</b>	<b>\$ 122,688</b>	<b>\$ (15,486)</b>

Source: Bid Tabulations, Award Resolutions, and Payment Applications.

**Table 8.4.2**  
**Wastewater Project Bid Scoring Summary**

Project	No. of Bids	Maximum Score Value (Points)	Winning Score (Points)	2 <sup>nd</sup> Highest Score (Points)	3 <sup>rd</sup> Highest Score (Points)
SEWPCP - New Headworks Grit Replacement	2	1,000	873.5	771.6	n/a
SEWPCP Biosolids Digester Project – Pre-Construction & Construction Services	2	1,000	1,000	906.26	n/a

Source: Bid Tabulations

**Table 8.4.3**  
**Water Projects Value Variance Analysis**  
**(\$000)**

Project	No. of Bids	Winning Bid Value	Total Change Order Value	Total Project Value	Engineer's Estimate (EE)	Variance Total Project Value & EE
Calaveras Dam Upgrade	5	\$ 259,572	\$ 308,209	\$ 567,780	\$ 295,000	\$ (272,780)
BDPL Upgrade – Bay Tunnel	4	215,295	2,325	217,619	250,343	32,724
BDPL Upgrade– Pipeline No. 5 Easy Bay Reach	8	61,558	22,212	83,800	97,771	13,971
HTWTP – Long-Term Improvements	5	174,197	22,288	196,485	235,250	38,765
Regional Ground Water Storage & Recovery	4	42,980	20,327	63,307	50,025	(13,282)
Alameda Siphon No. 4	4	31,933	6,802	38,736	41,410	2,674
Bioregional Habitat Restoration – San Antonio Creek	4	12,947	3,211	16,158	13,000	(3,158)
Cherry Dam Outlet Works Rehabilitation	6	3,063	3,866	6,930	4,500	(2,430)
Lower Cherry Aqueduct*	n/a	n/a	n/a	3,679	n/a	n/a
Moccasin Shops / Office Building & Materials Bins	2	9,171	551	9,722	9,430	(292)
Moccasin Control & Server Building	8	6,611	419	7,030	4,700	(2,330)
Mountain Tunnel Access & Adit Improvement	2	4,287	961	5,248	5,000	(248)
Mountain Tunnel Inspection & Repair 2017	6	4,960	651	5,611	5,500	(111)
Mountain Tunnel Inspection & Repair 2018	4	5,875	938	6,813	6,200	(613)
<b>TOTAL</b>		<b>\$ 832,449</b>	<b>\$ 392,760</b>	<b>\$ 1,228,918</b>	<b>\$ 1,018,129</b>	<b>\$ (207,110)</b>

Source: Bid Tabulations, Award Resolutions, and Payment Applications.

The Lower Cherry Aqueduct is an emergency project; thus, normal procurement procedures did not apply.

**Table 8.4.4**  
**Power Projects Value Variance Analysis**  
**(\$000)**

Project	No. of Bids	Winning Bid Value	Total Change Order Value	Total Project Value	Engineer's Estimate (EE)	Variance Total Project Value & EE
Holm Powerhouse Refurb. & Kirkwood Powerhouse Oil Containment	2	\$ 9,948	\$ 1,894	\$ 11,482	\$ 9,200	\$ (2,282)
Kirkwood Penstock Short-Term Risk Reduction	3	1,277	(199)	1,158	1,220	62
<b>TOTAL</b>		<b>\$ 11,225</b>	<b>\$ 1,695</b>	<b>\$ 12,640</b>	<b>\$ 10,420</b>	<b>\$ (2,220)</b>

Source: Bid Tabulations, Award Resolutions, and Payment Applications.

# Appendix B: Department Response



525 Golden Gate Avenue, 13th Floor  
San Francisco, CA 94102  
T 415.554.3155  
F 415.554.3161  
TTY 415.554.3488

August 11, 2023

Mark de la Rosa  
Director of Audits  
City Hall, Room 476  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102

Subject: The San Francisco Public Utilities Commission Spent Revenue Bond Funds for Allowable Purposes but Should Strengthen Its Compliance and Monitoring Controls

Dear Mr. de la Rosa,

Thank you for providing us the opportunity to review the audit report, *The San Francisco Public Utilities Commission Spent Revenue Bond Funds for Allowable Purposes but Should Strengthen Its Compliance and Monitoring Controls*, prepared by the Controller's Office City Services Auditor.

We appreciate the time your staff dedicated to this audit. We agreed with the report where we could and, where we could not agree, provided details. Since becoming General Manager, I have sought to strengthen our internal processes and controls. Our team will continue to comply with all applicable laws, policies, and procedures. We respectfully disagree with the fundamental premises of this audit, as stated in the opening letter, and numerous statements and conclusions in the audit. The SFPUC has strong processes and procedures in place and professional staff who work hard to implement the same. What is meant by "coordination" with the Revenue Bond Oversight Committee is unclear – by law, the RBOC is an oversight and reporting body, it is not involved in government decisions. Other statements throughout the report raise concerns: the auditors' late inclusion of the "COSO Framework," which as an internal control framework is not a contracting standard, unsupported assumptions about all contracts between June 2003 and November 2020 (p. 35), and speculative statements about confidential investigations (p. 45). As a result, we cannot agree with a number of the auditors' conclusions.

London N. Breed  
Mayor

Newsha K. Ajami  
President

Sophie Maxwell  
Vice President

Tim Paulson  
Commissioner

Anthony Rivera  
Commissioner

Kate H. Stacy  
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.



We look forward to continuing to work with the Controller's office to provide the public as much information as possible and maintain our transparency.

If there are any questions or additional information is needed, please do not hesitate to contact me at 415-554-1600.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dennis Herrera".

For Dennis Herrera

Dennis Herrera  
General Manager

CC: Ronald Flynn, Deputy General Manager  
Stephen Robinson, AGM Infrastructure  
Nancy Hom, AGM Business Services/CFO  
Irella Blackwood, Audit Director



## Recommendations and Responses

For each recommendation, the responsible agency should indicate in the column labeled Agency Response whether it concurs, does not concur, or partially concurs and provide a brief explanation. If it concurs with the recommendation, it should indicate the expected implementation date and implementation plan. If the responsible agency does not concur or partially concurs, it should provide an explanation and an alternate plan of action to address the identified issue.

Recommendation	Agency Response	CSA Use Only Status Determination*
The San Francisco Utilities Commission should:		
<p>1. Follow the guidance in the COSO Framework for control environment and require the completion of I/CS forms on all procurements above \$500,000, and for those procurements where SFPUC deems appropriate to further strengthen its control environment.</p>	<p> <input type="checkbox"/> Concur                <input type="checkbox"/> Do Not Concur                <input checked="" type="checkbox"/> Partially Concur         </p> <p>The SFPUC is pleased to note that we are in compliance with applicable city laws, policies and practices. The SFPUC will continue to look to the City and County of San Francisco for guidance in contracting. The department has a multi-prong approach to maintaining the integrity of the procurement process which includes education, training and acknowledgement. In 2021, the SFPUC formally approved the Competitive Selection Process Communications Policy, which governs communications that may confer a competitive advantage. Additionally, all Contract Administration Bureau staff and other SFPUC staff involved in the solicitation review process sign SFPUC Solicitation Conflict of Interest Statement and Confidentiality Agreement. All SFPUC employees participating as panelist during solicitation evaluation sign a Panelist Acknowledgement Form.</p> <p>With respect to the wording of the recommendation, the SFPUC assumed the auditors intended "all procurements" to mean professional services since that was the topic throughout the fieldwork stage. It is unclear how the \$500,000 was calculated or what it is rooted in.</p> <p>The SFPUC respectfully departs from several conclusions drawn in this report. We'd like to highlight a few things:</p> <ol style="list-style-type: none"> <li>SFPUC staff were never asked about the COSO Framework during the fieldwork stage, and it is not a standard in PUC contracting. The auditor inserted this criterion between the first and second draft reports.</li> </ol>	<p> <input checked="" type="checkbox"/> Open  <input type="checkbox"/> Closed  <input type="checkbox"/> Contested         </p>

Recommendation	Agency Response	CSA Use Only Status Determination*
	<p>2. SFPUC staff communicated to the auditor several times that the PUC was not obligated to form a technical panel for CS-224A and CS-224B and the report provides no evidence to the contrary. We disagree with questioning of the \$15.360 in expenditures.</p> <p>3. Page 30 alleges that “all contracts” covering nearly a twenty-year period were under the former GM’s “control” and as such “...deemed to be a material weakness... as the former GM did not demonstrate ethical behavior and management integrity...” and that “The ethical tone set by the former GM increased the risk of waste and abuse during his time as AGM of Infrastructure and later, GM.” – but provides no evidence to show that. The former General Manager of course had authority over and access to information throughout the department. But it was SFPUC staff who diligently managed the day-to-day contracting processes in conformance with applicable law and policies.</p> <p>4. The report states the former General Manager was convicted of “having the ability to influence the awarding some city contracts” – but that does not appear to be the wording from the Department of Justice. The auditor also details a “joint investment” between mLok and the former General Manager but provides no causal link between this, the COSO Framework and how I/CS forms would have affected the joint investment.</p> <p>5. The report includes a statement that contract C-224A “could” be under a confidential investigation. The auditor provides no evidence of this and it appears misplaced in a report abiding by auditing standards.</p> <p>The report also noted that the auditor “inspected an Acknowledgement form signed by an SFPUC Employee on September 8, 2011,” – the SFPUC never received a copy of this form, despite requests, and we disagree that its existence means I/CS forms should have been signed for the CS-224A and CS-224B solicitations.</p>	

Recommendation	Agency Response	CSA Use Only Status Determination*
<p>2. Follow the guidance in the COSO Framework for monitoring activities and request all publicly available information from the City Attorney on its investigations of SFPUC procurement practices and periodically report such publicly available information to the RBOC, where procurement practices impact revenue bond expenditures to further strengthen monitoring activities.</p>	<p><input type="checkbox"/> Concur      <input checked="" type="checkbox"/> Do Not Concur      <input type="checkbox"/> Partially Concur</p> <p>In 2020, the City Attorney and Controller launched a joint investigation into public corruption identified in the criminal complaint. While the City Attorney focused on employee and contractor wrongdoing across multiple departments, the Controller undertook a Public Integrity review of city contracts, purchase orders, and grants to identify red flags possibly indicating process failures. We are advised that the work of the City Attorney is privileged and confidential and is not public. We are also advised that the City Attorney works with and advises other City departments, including the Controller’s Office and its City Services Auditor, concerning public integrity and government contract processes. The Controller has issued several public reports with the information sought by this request, with another public integrity assessment forthcoming on the procurement processes at issue in the federal criminal investigation of Harlan Kelly.</p>	<p><input type="checkbox"/> Open <input type="checkbox"/> Closed <input checked="" type="checkbox"/> Contested</p>
<p>3. Coordinate with RBOC and SFPW to quantify, evaluate, and report on the monetary impacts of SFPW’s overhead rates charged on total direct labor and benefit expenditures subject to RBOC oversight, so that the RBOC can exercise proper oversight over such overhead expenditures.</p>	<p><input type="checkbox"/> Concur      <input checked="" type="checkbox"/> Do Not Concur      <input type="checkbox"/> Partially Concur</p> <p>The RBOC oversees the SFPUC, as an independent oversight body; we would not ‘coordinate’ with them to “quantify, evaluate, and report” on any matter. The SFPUC routinely provides detailed information and updates to the RBOC to fulfill its oversight role upon their request. We will continue to respond to all reasonable RBOC requests for relevant information available to our staff.</p> <p>Regarding the SFPW rates, we would like to highlight that SFPW works closely with the Controller’s Office to set those rates and those rates do not vary by city department. This recommendation would also have broader implications; as noted in the observation 32-34% of projects are for the SFPUC. Other departments would also be subject to a recommendation such as this. SFPW’s overhead rate information is already publicly available.</p> <p>Lastly, under the right of first refusal in accordance with an MOU, the SFPUC is obligated to offer work to the SFPW – and only if SFPW declines can the work be offered up outside of SFPW. We did note this to the auditors during the fieldwork stage and it is stated in the report observation.</p>	<p><input type="checkbox"/> Open <input type="checkbox"/> Closed <input checked="" type="checkbox"/> Contested</p>

\* Status Determination based on audit team’s review of the agency’s response and proposed corrective action.