



**PUBLIC UTILITIES  
REVENUE BOND OVERSIGHT COMMITTEE  
CITY AND COUNTY OF SAN FRANCISCO  
AGENDA**

**REMOTE MEETING**

**Listen/Public Call-In Phone Number  
(415) 906-4659  
Conference ID: 374 896 305#**

**April 19, 2022 - 9:00 AM**

**Regular Meeting**

**Remote Access to Information and Participation**

On March 17, 2020, the Board of Supervisors authorized their Board and Committee meetings to convene remotely (via Microsoft Teams) and will allow remote public comment via teleconference.

Members of the public may participate by phone or may submit their comments by email to: [RBOC@sfgov.org](mailto:RBOC@sfgov.org); all comments received will be made a part of the official record. Revenue Bond Oversight Committee agendas and their associated documents are available at: <https://sfpuc.org/about-us/boards-commissions-committees/revenue-bond-oversight-committee>

Listen/Public Call-In Phone Number:  
(415) 906-4659 Conference ID: 374 896 305#

As the COVID-19 disease progresses, please visit the Board's website ([www.sfbos.org](http://www.sfbos.org)) regularly to be updated on the current situation as it affects the legislative process. For more information contact Assistant Clerk Victor Young at (415) 554-7723.

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

1. **Call to Order, Roll Call, and Agenda Changes**

Members:

Seat 1	Ettore Leale, Chair
Seat 2	Lars Kamp
Seat 3	Vacant
Seat 4	Vacant
Seat 5	Vacant
Seat 6	Christina Tang
Seat 7	Reuben Holober

2. **RBOC: Findings to Allow Teleconferenced Meetings During Declared Emergency** (*Discussion and possible action*)

Proposed Motion: ADOPT FINDINGS as required by Assembly Bill 361 that 1) the Committee has considered the circumstances of the state of emergency; 2) the state of emergency continues to directly impact the ability of policy body members to meet safely in person; and 3) state or local officials continue to impose or recommend measures to promote social distancing.

3. **Public Comment:** Members of the public may address the Revenue Bond Oversight Committee (RBOC) on matters that are within the RBOC's jurisdiction but are not on today's agenda.

4. **SFPUC: Bond Issuance Update** (*Discussion and possible action*)

5. **SFPUC: Hearing on Finding #2 of the RBOC Performance Audit – Presentation on the Quality Assurance Audit Function of the Infrastructure Division, Infrastructure Division, SFPUC.** (*Discussion and possible action*)

6. **RBOC: Planning for next RBOC audit** (Presentation on suggested approaches by CSA and HKA/Yano.) (*Discussion and possible action*)

7. **RBOC: Planning for potential future audits to evaluate the performance of projects funded by revenue bonds.** (*Discussion and possible action*) (*attachment*)

8. **Approval of Minutes:** February 15, 2022, and March 8, 2022, Meeting Minutes. (*Discussion and possible action*) (*attachment*)

9. **Announcements, Comments, Questions, and Future Agenda Items.** (*Discussion and possible action*)

Upcoming Meeting Dates: May 17, 2022, June 14, 2022, and July 19, 2022.

Pending Issues:

- A. Request that SSIP Quarterly reports include information on Stormwater Management System and details on the bidding climate and possible cost increase)
- B. RBOC: Acquiring consultant to examine expected performance of complete projects.
- C. SFPUC: Staff Report: Environmental Justice
- D. SFPUC: Power Enterprise and Clean Power SF Update
- E. SFPUC: Mountain Tunnel Site Tour
- F. SFPUC: State Federal Loan Updates
- G. SFPUC: Oceanside Wastewater Plant Tour
- H. RBOC: Discussion on the 2015 report, entitled “Evaluation of Lessons Learned from the WSIP Program,” procedures and reporting processes taken from WSIP applied to SSIP
- I. SFPUC: Wastewater System Improvement Program Update
- J. RBOC: Discussion on the coordination of PUC Site Tours
- K. SFPUC: Water Infrastructure Update (May)
  - Water System Improvement Program (WSIP)
  - Water Enterprise Capital Improvement Program (WECIP)
  - Hetch Hetchy Capital Improvement Program (HCIP)

10. **Adjournment**

### Agenda Item Information

Each item on the agenda may include: 1) Department or Agency cover letter and/or report; 2) Public correspondence; 3) Other explanatory documents. For more information concerning agendas, minutes, and meeting information, such as these documents, please contact RBOC Clerk, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102 – (415) 554-5184.

Audio recordings of the meeting of the Revenue Bond Oversight Committee are available at: [http://sanfrancisco.granicus.com/ViewPublisher.php?view\\_id=97](http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=97)

For information concerning San Francisco Public Utilities Commission please contact by e-mail [RBOC@sfgov.org](mailto:RBOC@sfgov.org) or by calling (415) 554-5184.

### Meeting Procedures

Public Comment will be taken before or during the Committee’s consideration of each agenda item. Speakers may address the Committee for up to three minutes on that item. During General Public Comment, members of the public may address the Committee on matters that are within the Committee’s jurisdiction and are not on the agenda.

Procedures do not permit: 1) persons in the audience to vocally express support or opposition to statements by Commissioners by other persons testifying; 2) ringing and use of cell phones, pagers, and similar sound-producing electronic devices; 3) bringing in or displaying signs in the meeting room; and 4) standing in the meeting room.

The ringing of and use of cell phones, pagers and similar sound-producing electronic devices are prohibited at this meeting. Please be advised that the Chair may order the removal from the meeting room of any person(s) responsible for the ringing or use of a cell phone, pager, or other similar sound-producing electronic devices.

LANGUAGE INTERPRETERS: Requests must be received at least 48 hours in advance of the meeting to help ensure availability. Contact Wilson Ng or Arthur Khoo at (415) 554-5184. AVISO EN ESPAÑOL: La solicitud para un traductor debe recibirse antes de mediodía de el viernes anterior a la reunion. Llame a Wilson Ng o Arthur Khoo (415) 554-5184. PAUNAWA: Ang mga kahilingan ay kailangang matanggap sa loob ng 48 oras bago mag miting upang matiyak na matutugunan ang mga hiling. Mangyaring tumawag kay sa (415) 554-5184.

### Disability Access

Revenue Bond Oversight Committee meetings are held at the Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, CA. The hearing rooms at the Public Utilities Commission are specified on the agenda and are wheelchair accessible. To request sign language interpreters, readers, large print agendas or other accommodations, please call (415) 554-5184. Requests made at least 48 hours in advance of the meeting will help to ensure availability.

翻譯 必須在會議前最少四十八小時提出要求  
請電 (415) 554-7719

### **Know Your Rights Under the Sunshine Ordinance**

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions, boards, councils, and other agencies of the City and County exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and that City operations are open to the people's review.

For more information on your rights under the Sunshine Ordinance (San Francisco Administrative Code, Chapter 67) or to report a violation of the ordinance, contact by mail: Sunshine Ordinance Task Force, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102; phone at (415) 554-7724; fax at (415) 554-5163; or by email at [sotf@sfgov.org](mailto:sotf@sfgov.org).

Citizens may obtain a free copy of the Sunshine Ordinance by printing San Francisco Administrative Code, Chapter 67, at <http://www.sfbos.org/sunshine>.

### **Ethics Requirements**

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the San Francisco Ethics Commission at 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 252-3100; fax (415) 252-3112; web site <http://www.sfgov.org/ethics>.

Under Campaign and Governmental Conduct Code, Section 1.127, no person or entity with a financial interest in a land use matter pending before the Board of Appeals, Board of Supervisors, Building Inspection Commission, Commission on Community Investment and Infrastructure, Historic Preservation Commission, Planning Commission, Port Commission, or the Treasure Island Development Authority Board of Directors, may make a campaign contribution to a member of the Board of Supervisors, the Mayor, the City Attorney, or a candidate for any of those offices, from the date the land use matter commenced until 12 months after the board or commission has made a final decision, or any appeal to another City agency from that decision has been resolved. For more information about this restriction, visit [sfethics.org](http://sfethics.org).

### **Lobbyist Registration and Reporting Requirements**

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100, et. seq.] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the Ethics Commission at: 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 581-3100; fax (415) 252-3112; website [www.sfgov.org/ethics](http://www.sfgov.org/ethics).



## MEMORANDUM

Date: April 1, 2022

To: Revenue Bond Oversight Committee, San Francisco Public Utilities Commission (SFPUC)

From: John Squerciati, PE, CFM and Mathew Mampara, PE

Subject: **SFPUC Infrastructure Resilience Projects – Draft Approach for Determining Return on Investment (ROI)**

---

### Introduction

Dewberry Engineers Inc. (Dewberry) has prepared this memorandum to describe an analysis framework that would support the efforts of the San Francisco Public Utilities Commission's (SFPUC) Revenue Bond Oversight Committee to evaluate Return on Investment (ROI) for various infrastructure resilience projects funded by the SFPUC Green Bond Program and other initiatives. The application of the proposed framework to a representative portion of SFPUC bonded projects would offer the Committee an independent, documented, reproducible, and defensible set of inputs to integrate into its oversight responsibilities.

### 1.0 Return on Investment (ROI) Model and Benefit Categories

Return on Investment (ROI), also known as Benefit-Cost Analysis (BCA), is used to demonstrate that the benefits of a project outweigh its costs, or the ROI is greater than 1.0.<sup>1</sup> Benefits are the economic, social and environmental advantages associated with a proposed resilience project; while costs are the initial and long-term investments associated with a proposed project. ROI is used to compare the benefits of a project to its costs. Federally-funded resilience grant programs usually require that a project's ROI must be greater than 1.0 to be eligible for funding<sup>2</sup>.

Most project benefits occur over a period of time into the future; while most of the project costs are incurred up front and in the present. Returns on Investment are generally prepared on a net present value basis, meaning the present value of the benefits gained over the life of the project are compared to the total project costs to establish the ROI. Because most project benefits accumulate over time, project

---

<sup>1</sup> The return on investment is calculated as follows:  $ROI = \frac{Benefits}{Costs}$

<sup>2</sup> For projects funded by the Federal Emergency Management Agency (FEMA), the ROI is known as the benefit-cost ratio (BCR).

benefits can be calculated on an average annual basis (“annualized”) and then multiplied by a Present Value Coefficient (PVC)<sup>3</sup> to determine the present value of the annualized benefits.

Potential project benefits associated with various infrastructure resilience projects may be classified as follows. (Note that some of these benefit categories may overlap with each other.)

- **Service Losses:** The economic benefits of service losses include avoided utility service losses and avoided additional costs to provide utility service on a temporary/emergency basis until normal service is restored, damage to the structure, and avoided damage to contents and equipment. The economic impact of utility service losses can be approximated based on average unit values<sup>4</sup> multiplied by the number of impacted customers and the duration of the service loss to estimate the total utility service loss. An alternative to this approach is to quantify service losses to individual residential and non-residential buildings using damage functions for flood or fragility curves for seismic multiplied by the duration of the service loss. In addition to utility service losses, there may be additional long-term costs to temporarily restore utility service on an emergency basis until permanent repairs are completed. For utility plants and other non-building infrastructure, service loss durations and temporary/emergency repair costs can be estimated based on past historic damages and recorded service losses, or developed based on professional engineering estimates.
- **Health and Safety:** The economic benefits of health and safety include avoided damage avoided casualties and improved health associated with the project. Avoided casualty benefits associated with utility infrastructure retrofits are typically limited to projects that address hazards that occur with little or no warning such as earthquakes, wildfires, and flash floods. Some Federal agencies attempt to quantify the value of avoided casualties based on estimated statistical values of injuries and lives.<sup>5</sup> Improved health benefits associated with utility infrastructure resilience projects are related to reduced carbon dioxide and other greenhouse gas (GHG) emissions. These improved health benefits are typically incorporated as part of ecosystem services; which is discussed next.

---

<sup>3</sup> The present value coefficient is calculated as follows:  $PVC = \left[ \frac{1-(1-r)^{-T}}{r} \right]$

Where:  $r$  is the discount rate and  $T$  is the useful life of the project. For many infrastructure projects, the useful life of the project is 50 years and, per Office of Management and Budget (OMB) guidelines, the discount rate for Federally funded mitigation projects is 7.00 percent. However, some agencies may use lower discount rates.

<sup>4</sup> As an example of average unit values, FEMA has developed the following average values to reflect the regional economic impact of lost utility services:

- \$174/person/day for loss of electrical service
- \$58/person/day for loss of wastewater service
- \$114/person/day for loss of potable water service

These unit values can be found in the latest version of the FEMA BCA Toolkit software, Version 6.0; which can be downloaded from FEMA’s website using the following link: <https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis>

<sup>5</sup> As an example, the Federal Aviation Administration (FAA) has developed values of life and injury for use in economic analyses. As of 2016, these values include \$28,000 per minor injury, \$1,008,000 per serious injury, and \$9,600,000 per fatality. FEMA and the US Environmental Protection Agency (USEPA) use similar values.

- **Ecosystem Services:** Ecosystem service benefits are environmental benefits that can be used to quantify land acquisition and restoration, green infrastructure projects, and energy efficiency efforts. These benefits are extremely important for infrastructure resilience projects to reduce the impacts of extreme heat and stormwater runoff, and may include one or more of the following benefit categories:
  - Energy savings – Improved insulation and replacing inefficient HVAC equipment can reduce energy costs by decreasing the amount of electricity or fuel required to operate the facility.
  - Climate regulation – Projects that increase green space within a community may reduce greenhouse gas emissions and mitigate against urban heat island (UHI) impacts.
  - Erosion control – Increased vegetation along flood-prone streams or wildfire-prone slopes can reduce the risk of bank erosion and landslides.
  - Stormwater management – Projects that preserve or restore green space increase stormwater retention and reduce runoff that reduce the risk of flooding.
  - Air quality – Acquisition and restoration of green space, green infrastructure projects, and energy efficiency efforts improve air quality by reducing the carbon dioxide (CO<sub>2</sub>) and other greenhouse gases (GHG).
  - Biodiversity – Many green infrastructure or rewilding projects enhance biodiversity by allowing fish and wildlife habitats to thrive.
  - Longevity – Some resilience projects can increase asset longevity, extending the infrastructure’s service life and/or reducing operations and maintenance costs.
  - Aesthetics/Acoustics – Some resilience projects can improve the appearance of a building or streetscape, and others can even reduce local ambient noise.
  - Quality of life – As mentioned previously, many resilience projects can improve quality of life and health by offering recreational benefits and reducing GHG emissions.
  - Water quality – Adding green spaces can reduce combined sewer overflow (CSO) and provide natural filtration that can help improve water quality.
  - Local economic benefits – Adding trees or green spaces can help the local real estate market by increasing local property values surrounding the site, and some resilience project costs may be offset by tax credits or other incentives that can increase the local economy.

Unfortunately, despite the broad range of positive impacts, ecosystem service benefits are often difficult to quantify. Some Federal and local government agencies have developed unit benefit values that can be applied to acquired/restored areas to estimate the total ecosystem service benefits.<sup>6</sup> For green infrastructure and energy efficiency projects, Climate Resiliency Design

---

<sup>6</sup> As an example, FEMA has developed the following unit annual values for ecosystem service benefits based on land use types:

- \$8,308/acre/year for open green space
- \$39,535/acre/year for riparian
- \$554/acre/year for forest
- \$6,010/acre/year for wetland
- \$1,799/acre/year for marine and estuary



Guidelines (CRDG) published by the New York City Mayor's Office of Resiliency<sup>7</sup> provide local average unit benefits associated with addressing sea level rise, increased precipitation, and extreme heat hazards. Examples of some of these average unit benefits are listed below:

- \$0.015/gallon/year for runoff reduction projects that provide combined sewer overflow (CSO) abatement from the 5-year storm.
  - \$0.133/SF/year for green roofs (assuming 40-year project life)
  - \$0.020/SF/year for bioswale/rain garden/meadow mic (assuming 30-year project life)
  - \$0.020/SF/year for permeable grass pavers (assuming 30-year project life)
  - \$303/tree/year for tree plantings (assuming 30-year project life)
  - \$4.97/kWh or \$3.87/Therm for HVAC improvements that increase energy efficiency (assuming 25-year project life)
  - \$7.22/kWh or \$5.62/Therm for building envelope improvements (windows, insulation) that increase energy efficiency (assuming 50-year project life)
- **Social Benefits:** Social benefits are intended to address the positive impact of resilience on a community level. In some cases, social benefits related to quality of life and health may be considered ecosystem service benefits. Additionally, both social benefits and ecosystem services benefits can be extremely important for infrastructure resilience projects, but both can be difficult to quantify. Social benefits can address how a resilience project protects residents.<sup>8</sup> Another approach is to identify vulnerable or disadvantaged populations within the project impact area, and then quantify the impact of the proposed resilience project on community response and recovery. There are a range of approaches that can be used to identify vulnerable or disadvantaged populations, but unfortunately there are few techniques to quantify project benefits.
  - **Physical Damages:** The economic benefits of avoided physical damages include avoided damage to the structure and avoided damage to contents and equipment. Avoided physical damages associated with utility buildings can often be quantified using pre-determined damage functions or fragility curves. Examples of these damage functions and fragility curves for residential and non-residential buildings include:
    - Depth damage functions (DDFs) developed by the U.S. Army Corps of Engineers (USACE) based on building use, building configuration, foundation type, and number of stories as a function of flood depth.

---

These unit annual values for ecosystem service benefits include many of the benefit categories listed above, and can be found in the latest version of the FEMA BCA Toolkit software, Version 6.0.

<sup>7</sup> The latest version of the NYC Climate Resiliency Design Guidelines, Version 4.0 (September 2020), can be downloaded here: [https://www1.nyc.gov/assets/orr/pdf/NYC\\_Climate\\_Resiliency\\_Design\\_Guidelines\\_v4-0.pdf](https://www1.nyc.gov/assets/orr/pdf/NYC_Climate_Resiliency_Design_Guidelines_v4-0.pdf)

<sup>8</sup> As an example, FEMA allows use of the following social benefits for flood resilience projects that directly protect residential housing units:

- \$2,443/person for mental stress and anxiety treatment
- \$8,736/person for lost worker productivity

These unit values can then be multiplied by the number of impacted residents and workers to determine total social benefits, and can be found in the latest version of the FEMA BCA Toolkit software, Version 6.0. Note that FEMA guidance only allows social benefits for eligible projects where the initial BCR is 0.75 or greater.

- Wind damage functions (WDFs) developed by for Hazards U.S. Multi-Hazard (Hazu-MH) based on structural framing type, building height, roof shape, and roof cover as a function of wind speed.
- Earthquake fragility curves developed for Hazus-MH based on model building type (i.e., structural framing, lateral force resisting system, number of stories) and design code level as a function earthquake peak ground acceleration (PGA).

For utility plants and other non-building infrastructure, avoided physical damages can be estimated based on past historic damages documented by insurance claims, force account labor hours, and receipts. If past historic infrastructure damages are unavailable for a given facility, they can be developed based on professional engineering estimates.

## **2.0 Draft ROI Approach**

The following four-step draft ROI approach was prepared based on an overview of the SFPUC water, wastewater and power projects funded using the Green Bond Program between FY2015 and FY2020 as a starting point, and relies on Dewberry’s specific experience with various cost-effectiveness analysis techniques.

### **Step 1: Assess and Prioritize Resilience Projects**

The first step needed to develop an ROI approach is to gain an understanding of resilience projects funded to date. As an initial example, Dewberry researched the Green Bond Program on the SFPUC website and downloading copies of the available Green Bond Annual Reports for Water, Wastewater and Power for Fiscal Years 2018, 2019 and 2020. An initial review of the reports indicated that SFPUC had allocated \$545M Green Bond funds to 48 water, wastewater and power projects. Dewberry then compiled basic project information and cost data on these reports and conducted a basic statistical analysis of project budgets, expended costs, remaining funds, and project types in order to prioritize the projects. The results of this analysis established 28 priority projects listed in Table 1 on page 6, and removed 20 projects that were considered low priority for one of three reasons:

1. Six projects had no funds allocated and/or no funded expended to date.
2. Two projects were related to administrative or program management efforts rather than addressing specific water, wastewater or power infrastructure.
3. Twelve (12) projects had minimal funds (i.e., less than \$75,000 or 5% of the median project cost) expended to date.

Note that Dewberry would suggest adoption of a similar approach to prioritize additional resilience projects from other initiatives.

**Table 1: Summary of Priority Projects**

SFPUC Green Bond Project Name	Project Number	Project Cost			Cost Relevance?
		Estimated Budget (\$)	Total Cost Expended (\$)	Remaining Budget (\$)	
Regional Groundwater Storage and Recovery	CUW30103	\$9,752,541	\$9,752,541	\$0	Medium
Upper Alameda Creek Filter Gallery	CUW35201	\$1,856,862	\$1,412,871	\$443,991	Medium
Seismic BDPL @ Hayward Fault Phase 2	CUW35302	\$3,181,724	\$660,355	\$2,521,369	Med-Low
Alameda Siphon #4	CUW35902	\$74,987	\$19,471,358	(\$19,396,371)	Med-High
Security Systems Upgrades	CUW36302	\$1,225,367	\$178,318	\$1,047,049	Med-Low
HTWTP Long Term Improvements	CUW36701	\$35,659,426	\$33,505,436	\$2,153,990	Med-High
BDPL Reliability Upgrade - Tunnel	CUW36801	\$83,385,032	\$81,724,603	\$1,660,429	High
BDPL Reliability Upgrade - Pipeline	CUW36802	\$42,522,804	\$42,028,410	\$494,394	High
Crystal Springs Ps & Cs - SA PI	CUW37101	\$11,682	\$377,889	(\$366,207)	Med-Low
Calaveras Dam Replacement	CUW37401	\$32,848,192	\$15,457,945	\$17,390,247	Med-High
Habitat Reserve Program	CUW38802	\$18,914,745	\$18,986,031	(\$71,286)	Med-High
Watershed Environmental Improvement Program	CUW39401	\$0	\$677,865	(\$677,865)	Medium
Bay Division Pipeline Upgrade	CUWBDP01	\$0	\$587,397	(\$587,397)	Med-Low
Peninsula Water System Improvements	CUWPWI01	\$0	\$2,371,396	(\$2,371,396)	Medium
San Joaquin Water System Improvement Projects	CUWSJI01	\$0	\$151,115	(\$151,115)	Med-Low
Sunol Valley Water System Improvements	CUWSVI01	\$0	\$977,271	(\$977,271)	Medium
<b>Subtotal SFPUC Green Bond Water Projects</b>	<b>16</b>	<b>\$219,680,821</b>	<b>\$218,568,260</b>	<b>\$5,199,740</b>	
WW Collection System Improvements	N. I.	\$62,076,000	\$26,075,449	\$36,000,551	Med-High
WW Central Bayside System Improvements	N. I.	\$19,800,000	\$6,580,706	\$13,219,294	Medium
WW Biosolids-Digester Project	N. I.	\$0	\$24,665,499	(\$24,665,499)	Med-High
WW Stormwater Management/Flood Control	N. I.	\$49,417,066	\$18,601,984	\$30,815,082	Med-High
WW Northshore to Channel Force Main	N. I.	\$20,270,000	\$4,440,692	\$15,829,308	Medium
WW Treatment Plant Improvement	N. I.	\$0	\$113,878,176	(\$113,878,176)	High
WW Urban Watershed Assessment Project	N. I.	\$13,000,000	\$12,904,338	\$95,662	Med-High
<b>Subtotal SFPUC Green Bond Wastewater Projects</b>	<b>7</b>	<b>\$164,563,066</b>	<b>\$207,146,844</b>	<b>(\$42,583,778)</b>	
Kirkwood Penstock Rehabilitation	N. I.	\$2,667,250	\$1,789,614	\$877,636	Medium
Moccasin Penstock Rehabilitation	N. I.	\$2,465,798	\$1,447,514	\$1,018,284	Medium
Mountain Tunnel Hydroelectric Conveyance	N. I.	\$11,332,750	\$10,706,329	\$626,421	Medium
Oil Containment Upgrades for Holm & Kirkwood Hydroelectric Facilities	N. I.	\$812,147	\$812,147	\$0	Medium
Other Powerhouse Project - Holm Unit 2	N. I.	\$13,394,890	\$12,919,403	\$475,487	Med-High
<b>Subtotal SFPUC Green Bond Power Projects</b>	<b>5</b>	<b>\$30,672,835</b>	<b>\$27,675,007</b>	<b>\$2,997,828</b>	
<b>Total Priority SFPUC Green Bond Projects</b>	<b>28</b>	<b>\$414,916,722</b>	<b>\$453,390,111</b>	<b>(\$34,386,210)</b>	
	<b>Minimum</b>	\$0	\$0	\$0	<b>Lowest</b>
	<b>5 Percentile</b>	\$44,357	\$74,501	\$0	<b>Low</b>
	<b>45 Percentile</b>	\$399,210	\$670,505	\$0	<b>Med-Low</b>
	<b>Median</b>	\$443,567	\$745,006	\$0	<b>Medium</b>
	<b>55 Percentile</b>	\$9,355,643	\$11,343,461	\$4,198,934	<b>Med-High</b>
	<b>70 Percentile</b>	\$33,857,743	\$41,809,013	\$13,230,907	<b>High</b>
	<b>Maximum</b>	\$94,000,000	\$113,878,176	\$42,432,911	<b>Highest</b>

NOTES/ACRONYMS:

BDPL - Bay Division Pipeline

HTWTP - Harry Tracy Water Treatment Plant

## Step 2: Classify Higher Priority Resilience Projects

The second step in the draft ROI approach is to classify the projects into various types to facilitate analysis. Continuing with the Green Bond projects as an example, Once the 28 higher-priority projects were established, Dewberry conducted this task based on publicly available information regarding the various projects; which led to the following initial project types.

- **Water Projects:** Thirteen of the sixteen water projects were classified in one of the following five types:
  - Groundwater Storage and Recovery
  - Water Filtration/Purification
  - Tunnel/Pipeline Improvements
  - System Improvements
  - Seismic Retrofits
- **Wastewater Projects:** Five of seven wastewater projects are classified as either:
  - System improvements
  - Biosolids Digester Facility
- **Combined Projects:** Three of sixteen water projects and two of seven wastewater projects were classified as one these combined project types:
  - Flood Control/Storm Water Management (SWM)
  - Habitat Reserve/Watershed Improvement
- **Power Projects:** The five power projects fell into one of the following categories related to hydroelectric power upgrades:
  - Control Systems/Oil Containment
  - Water Conveyance

Each of these project types will be explained in greater detail in Step 3. Please refer to Table 2 on Page 8 for details.

## Step 3: Determine Initial ROI Approach and Potential Project Benefits by Project Type

The next step is to establish the initial ROI approach to determine project benefits for each project type. The basis for these initial ROI determinations was to use the ROI model and categories of benefits outlined in Section 1.0 to assess the benefits and costs of completed projects to facilitate project and investment evaluation. Continuing with the Green Bond projects as an example, a review of the initial project types (Step 2) led to five basic approaches to consider for various groups of projects, each with its own potential categories of benefits.

- 1) **Tunnel/Pipeline Improvements, Water and Wastewater System Improvements, and Hydroelectric Power Upgrade Projects (Flood):** Most categories of flood-related benefits associated with these types of projects can be assessed using a spreadsheet analysis tool such as the Federal Transit Administration (FTA) Hazard Mitigation Cost-Effectiveness (HMCE) Tool Version 2.2. The following specific strategies may be used to quantify various categories of project benefits:

- **Service Losses:** Avoided service losses for utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility service losses can be determined based on historic flood events or estimated using engineering reports prepared by design professionals familiar with infrastructure improvements. Avoided service losses for buildings can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data from a community's Flood Insurance Study (FIS) or a customized hydrologic and hydraulic (H&H) study.
- **Health and Safety:** Most health and safety benefits for these projects are expected to be included as part of ecosystem service benefits. Additional health and safety benefits are not expected to be a significant source of project benefits unless they reduce the risk of casualties from flash flooding.
- **Ecosystem Services:** Ecosystem services are expected to be a significant source of benefits for these projects. As stated previously, these benefits can be difficult to quantify. Therefore, we recommend one of the following approaches:
  - **Land Use Approach:** For projects where improvements can be quantified as a function of preserved or restored land use, consider using a breakdown of ecosystem services by land use shown in Table 3 on page 9 to approximate

**Table 2: Priority Project Types**

SFPUC Green Bond Project Name	Priority Project Type(s)										
	Water Projects					Flood Control/ SWM	Habitat Reserve/ Watershed Improvement	Wastewater Projects		Hydroelectric Power Upgrades	
	Groundwater Storage and Recovery	Water Filtration/ Purification	Tunnel/ Pipeline Improvements	System Improvements	Seismic Retrofits			System Improvements	Biosolids Digester Facility	Control Systems/Oil Containment	Water Conveyance (Penstocks)
Regional Groundwater Storage and Recovery	X										
Upper Alameda Creek Filter Gallery		X									
Seismic BDPL @ Hayward Fault Phase 2					X						
Alameda Siphon #4					X						
Security Systems Upgrades				X							
HTWTP Long Term Improvements				X							
BDPL Reliability Upgrade - Tunnel			X								
BDPL Reliability Upgrade - Pipeline			X								
Crystal Springs Ps & Cs - SA PI				X							
Calaveras Dam Replacement						X					
Habitat Reserve Program							X				
Watershed Environmental Improvement Program							X				
Bay Division Pipeline Upgrade			X								
Peninsula Water System Improvements				X							
San Joaquin Water System Improvement Projects				X							
Sunol Valley Water System Improvements				X							
<b>Subtotal SFPUC Green Bond Water Projects</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW Collection System Improvements								X			
WW Central Bayside System Improvements								X			
WW Biosolids-Digester Project									X		
WW Stormwater Management/Flood Control (SIPFC)						X					
WW Northshore to Channel Force Main								X			
WW Treatment Plant Improvement								X			
WW Urban Watershed Assessment Project									X		
<b>Subtotal SFPUC Green Bond Wastewater Projects</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>
Kirkwood Penstock Rehabilitation											X
Moccasin Penstock Rehabilitation											X
Mountain Tunnel Hydroelectric Conveyance											X
Oil Containment Upgrades for Holm & Kirkwood Hydroelectric Facilities										X	
Other Powerhouse Project - Holm Unit 2										X	
<b>Subtotal SFPUC Green Bond Power Projects</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>
<b>Total All SFPUC Green Bond Projects</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>

**Table 3: Breakdown of Ecosystem Service Benefits by Land Use Type and Category**

Ecosystem Service Benefit Category	Land Use Type				
	Green Open Space	Riparian	Forest	Wetland	Marine & Estuary
Aesthetic Value	\$1,707	\$612		\$3,640	
Air Quality	\$215	\$226			
Biological Control		\$173			
Climate Regulation	\$61	\$81	\$153	\$136	\$63
Erosion Control	\$68	\$12,042			
Flood Hazard Reduction		\$4,215	\$321		
Food Provisioning		\$641			
Habitat		\$878			\$1,214
Nutrient Cycling				\$536	\$522
Pollination	\$305				
Recreation/Tourism	\$5,644	\$15,967			
Stormwater Retention	\$308				
Water Filtration		\$4,473		\$1,406	
Water Supply		\$227	\$80	\$292	
<b>Total Ecosystem Service Benefits</b>	<b>\$8,308</b>	<b>\$39,535</b>	<b>\$554</b>	<b>\$6,010</b>	<b>\$1,799</b>

various categories of ecosystem service benefits.<sup>9</sup> Note the benefits in Table 3 are expressed in dollars per acre per year (\$/acre/year).

- **Unit Benefits Approach:** For projects with green infrastructure or energy efficient measures, the NYC CRDG unit benefits discussed previously in Section 1 may be used to quantify ecosystem service benefits.

- **Social Benefits:** Social benefits are not expected to be a major source of benefits for these projects unless they directly protect residential properties from flooding.
- **Physical Damages:** Physical damages to utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility damages can be determined from repair records based on historic flood events or estimated using design professionals familiar with infrastructure improvements. Avoided physical damage to buildings can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data.

2) **Seismic Retrofit Projects (Earthquakes):** Most categories of earthquake-related benefits associated with these types of projects can be assessed using a spreadsheet analysis tool such as the FEMA BCA Tool V 6.0 or the FTA HMCA Tool V 2.2. The following specific strategies may be used to quantify various categories of project benefits:

- **Service Losses:** Service losses for utilities and associated infrastructure are expected to be the primary source of project benefits. Given the limited history of seismic events in most locations, avoided utility service losses can be estimated using seismic design

<sup>9</sup> Note this although approach is based on FEMA’s unit ecosystem services unit annual values for ecosystem service benefits based on land use types, use of the breakdowns is not currently endorsed by FEMA BCA guidance.

professionals familiar with infrastructure improvements. Avoided service losses for buildings can be estimated using Hazus earthquake fragility curves based on building-specific data and seismic hazard data from the United States Geological Survey (USGS).

- **Health and Safety:** Most health and safety benefits for these projects are expected to result from reduced casualties to occupants of retrofitted buildings. Additional health and safety benefits are not expected to be a significant source of project benefits.
- **Ecosystem Services:** Ecosystem services are not expected to be a major source of benefits for seismic retrofit projects.
- **Social Benefits:** Social benefits are not expected to be a major source of benefits for seismic retrofit projects.
- **Physical Damages:** Physical damages to utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility damages can be estimated using seismic design professionals familiar with infrastructure improvements. Avoided physical damage to buildings can be estimated using Hazus earthquake fragility curves based on building-specific data and seismic hazard data from the United States Geological Survey (USGS).

3) **Water Filtration/Purification, Habitat Reserve/Watershed Improvement, Wastewater System Improvement, and Control Systems/Oil Containment Projects (Ecosystem):** The following specific strategies may be used to quantify various categories of project benefits:

- **Service Losses:** Service losses for utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility service losses can be determined based on historic flood events or estimated using design professionals familiar with infrastructure improvements. Avoided service losses for buildings can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data from a community's Flood Insurance Study (FIS) or a customized hydrologic and hydraulic (H&H) study.
- **Health and Safety:** Most health and safety for these projects are expected to be included as part of ecosystem service benefits. Additional health and safety benefits are not expected to be a significant source of project benefits unless they reduce the risk of casualties from flash flooding or earthquakes.
- **Ecosystem Services:** Ecosystem services are expected to be the primary source of project benefits. Given the difficulties in quantifying such benefits, we recommend quantifying them one of approaches listed below:
  - **Land Use Approach:** For projects that include preserved or restored land use, consider using a breakdown of ecosystem services by land use shown in Table 3 on page 9 to approximate various categories of ecosystem service benefits in dollars per acre per year (\$/acre/year).
  - **Unit Benefits Approach:** For projects with green infrastructure or energy efficient measures, the NYC CRDG unit benefits discussed previously in Section 1 may be used to quantify ecosystem service benefits.
- **Social Benefits:** Most social benefits for these projects are expected to be included as part of ecosystem service benefits. Additional social benefits are not expected to be a



significant source of project benefits unless they directly protect residential properties from flooding or flood-related hazards.

- **Physical Damages:** Physical damages to utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility damages can be determined from repair records based on historic flood events or estimated using design professionals familiar with infrastructure improvements. Avoided physical damage to buildings can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data.

4) **Green Infrastructure and Energy Resilience Projects (Other Ecosystem):** Use CRDG v4.0 for the potential benefits associated with other project types. The following specific strategies may be used to quantify various categories of project benefits:

- **Service Losses:** Service losses are not expected to be a major source of benefits for green infrastructure and energy resilience projects.
- **Health and Safety:** Most health and safety benefits for these projects are expected to be included as part of ecosystem service benefits. Additional health and safety benefits are not expected to be a significant source of project benefits unless they reduce the risk of casualties from flash flooding.
- **Ecosystem Services:** Ecosystem services are expected to be the primary source of green infrastructure and energy resilience projects project benefits. Given the difficulties in quantifying such benefits, we recommend quantifying them using the **Unit Benefits Approach** based on NYC CRDG unit benefits discussed previously in Section 1 may be used to quantify ecosystem service benefits.
- **Social Benefits:** Social benefits are not expected to be a major source of benefits for green infrastructure and energy resilience projects.
- **Physical Damages:** For green infrastructure and energy resilience projects, service losses are not expected to be a major source of benefits. The savings in electricity and fuel costs from could be considered a cost of avoided physical damages and could be estimated based on utility service records or discussions with the utility facility manager.

5) **Groundwater Storage and Recovery Projects:** These types of projects can be specifically assessed using the Aquifer Storage and Recovery (ASR) project module in FEMA BCA Tool V6; which uses a systematic approach to determine flood and drought resilience project benefits. The following specific strategies may be used to quantify various categories of project benefits:

- **Service Losses:** Service losses for utilities and associated infrastructure are expected to be the primary source of project benefits. Avoided utility service losses can be determined from modeled damages based on potable water demands, system supply needs, and impact durations for various drought recurrence intervals. As an alternative, avoided utility service losses can be determined from historic flood events or estimated using design professionals familiar with water systems. Avoided service losses for buildings, where applicable, can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data from a community's Flood Insurance Study (FIS) or a customized hydrologic and hydraulic (H&H) study.

- **Health and Safety:** Most health and safety for these projects are expected to be included as part of ecosystem service benefits. Additional health and safety benefits are not expected to be a significant source of project benefits unless they reduce the risk of casualties from flash flooding.
- **Ecosystem Services:** Ecosystem services can be a source of some project benefits. Given the difficulties in quantifying such benefits, we recommend quantifying them using the **Unit Benefits Approach** based on NYC CRDG unit benefits discussed previously in Section 1 may be used to quantify ecosystem service benefits.
- **Social Benefits:** Social benefits are not expected to be a major source of benefits for groundwater storage and recovery projects. Additional social benefits are not expected to be a significant source of project benefits unless they directly protect residential properties from flooding or flood-related hazards.
- **Physical Damages:** Physical damages to utilities and associated infrastructure are not expected to be the primary source of project benefits for groundwater storage and recovery projects. Avoided utility damages can be determined from repair records based on historic flood events or estimated using design professionals familiar with infrastructure improvements. Avoided physical damage to buildings, where applicable, can be estimated using flood depth damage functions (DDFs) based on building-specific data and flood hazard data.

#### **Step 4: Data Collection and Use Initial ROI Approaches to Determine Draft Project ROIs**

The final step is to establish the initial ROI approach using the data collected in the previous steps to prepare ROI analyses using the five basic methods described in Step 3. Once all of the necessary project benefit and cost data inputs are input into a spreadsheet analysis tool such as FEMA's BCA Tool or the FTA's Hazard Mitigation Cost Effectiveness (HMCE) tool, the software computes the ROI ratio expressed as a project BCR.



**PUBLIC UTILITIES  
REVENUE BOND OVERSIGHT COMMITTEE  
CITY AND COUNTY OF SAN FRANCISCO  
MINUTES \_ DRAFT**

**REMOTE MEETING**

**February 15, 2022 - 9:00 AM**

**Special Meeting**

**Remote Access to Information and Participation**

On March 17, 2020, the Board of Supervisors authorized their Board and Committee meetings to convene remotely (via Microsoft Teams) and will allow remote public comment via teleconference.

Members of the public may participate by phone or may submit their comments by email to: [RBOC@sfgov.org](mailto:RBOC@sfgov.org); all comments received will be made a part of the official record. Revenue Bond Oversight Committee agendas and their associated documents are available at: <https://sfpuc.org/about-us/boards-commissions-committees/revenue-bond-oversight-committee>

As the COVID-19 disease progresses, please visit the Board's website ([www.sfbos.org](http://www.sfbos.org)) regularly to be updated on the current situation as it affects the legislative process. For more information contact Assistant Clerk Victor Young at (415) 554-7723.

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

1. **Call to Order, Roll Call, and Agenda Changes**

Members:

- Seat 1 Ettore Leale, Chair
- Seat 2 Lars Kamp
- Seat 3 Vacant
- Seat 4 Vacant
- Seat 5 Vacant
- Seat 6 Christina Tang
- Seat 7 Reuben Holober

Chair Leale called the meeting to order at 9:02 a.m. On the call of the roll, Chair Leale and Members Kamp, Tang, and Holober were noted present. A quorum was present.

There were no agenda changes.

2. **RBOC: Findings to Allow Teleconferenced Meetings During Declared Emergency**

Proposed Motion: ADOPT FINDINGS as required by Assembly Bill 361 that 1) the Committee has considered the circumstances of the state of emergency; 2) the state of emergency continues to directly impact the ability of policy body members to meet safely in person; and 3) state or local officials continue to impose or recommend measures to promote social distancing.

**Chair Leale, seconded by Member Tang, moved to ADOPT FINDINGS as required by Assembly Bill 361 that 1) the Committee has considered the circumstances of the state of emergency; 2) the state of emergency continues to directly impact the ability of policy body members to meet safely in person; and 3) state or local officials continue to impose or recommend measures to promote social distancing.**

Public Comment:

David Pilpel stated that there has been a recent supplement to the emergency order and requested hybrid meetings in the future.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

3. **Public Comment:** Members of the public may address the Revenue Bond Oversight Committee (RBOC) on matters that are within the RBOC’s jurisdiction but are not on today’s agenda.

Speakers:

None.

4. **RBOC:** Performance Audit of Select Revenue Bond Expenditures – December 23, 2021

Massanda Djohms and Hunter Wang (Office of the Controller); Eugene Yano (HKA); presented the Performance Audit and responded to questions from the Committee. Nancy Hom and Mike Brown (SFPUC); Mark Blake (Office of the City Attorney); responded to questions from the Committee.

The RBOC requested future hearings on the following matters:

- \*SFPUC – Hearing on template for RBOC Bonds (by Nancy Hom)
- \*CSA – Plans and proposals for future audits
- \*SFPUC – Hearing on the Quality Audit Function in SFPUC

The RBOC confirm that the CSA is authorized to post the report on their website.

**Member Holober, seconded by Member Tang, moved to accept the Audit Report.**

Public Comment:

David Pilpel commented the availability of the presentation from the City Services Auditor (CSA) and various matters related to the audit report.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

5. **SFPUC:** Planning for next requests for proposal for contracts to acquire a consultant to examine project performance and other related audit services.

Chair Leale provide a summary on the matter.

Hunter Wang (Office of the Controller); Mike Brown (SFPUC); responded to questions from the Committee.

**Member Holober, seconded by Chair Leale, moved to continue the matter to the March 8, 2022 RBOC meeting.**

Public Comment:

David Pilpel provided suggestion to the proposal documents.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

6. **RBOC: Audit process, confidentiality, and procedure**

Chair Leale provided a summary on the matter and requested DCA Blake provide a summary at the next RBOC meeting.

Mike Brown (SFPUC); Mark Blake (Office of the City Attorney); responded to questions from the Committee.

The RBOC posed the following questions to DCA Blake:

Who get to see what information and when?

Whose work product does the audit belong to?

**Member Tang, seconded by Member Kamp, moved to continue the matter to the call of the chair.**

Public Comment:

David Pilpel commented on the matter, the confidentiality requirements, and timing for therelease of confidential documents.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

7. **RBOC: SFPUC Site Tour planning**

Chair Leale provided a summary on the matter.

Mike Brown (SFPUC); responded to questions from the Committee.

**Chair Leale, seconded by Member Kamp, moved to continue the matter to the March 8, 2022, RBOC meeting.**

Public Comment:

David Pilpel commented on the need for site tours and requested that a list of sites that can be toured be provided.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

8. **Approval of Minutes:** January 11, 2022, Meeting Minutes.

**Chair Leale, seconded by Member Kamp, moved to approve the January 11, 2022, meeting minutes as amended.**

Public Comment:

David Pilpel proposed various amendments to the minutes.

**The motion PASSED by the following vote:**

Ayes: Leale, Kamp, Tang, Holober

Noes: None

9. **Announcements, Comments, Questions, and Future Agenda Items.**

The RBOC requested Nancy Hom (SFPUC) provide an update on the implementation of the recommendation to improve visibility of bond proceeds expenditure.

The RBOC requested Hunter Wang (Office of the Controller) provide feedback as to what information their office requires from the RBOC in order to design RBOC's next audit subject matter/focus.

The RBOC requested Mike Brown (SFPUC) provide an updated regarding RBOC member recruitment.

Upcoming Meeting Dates: March 8, 2022, April 19, 2022, and May 17, 2022.

Items for the March 8, 2022 RBOC Meeting:

- SFPUC – Hearing on template for RBOC Bonds (by Nancy Hom)
- RBOC – Plans and proposals for future audits
- SFPUC – Hearing on the Quality Audit Function in SFPUC
- RBOC - Audit process, confidentiality, and procedure
- SFPUC - Sites tours Planning
- CAC/SFPUC - Planning for the RBOC's next requests for proposal for contracts to acquire a consultant to examine project performance and other related audit services.

Public Comment:

David Pilpel comment on the work of the RBOC, the short turnaround time to the next meeting and staff availability for Tuesday meeting.

Pending Issues:

- A. Request that SSIP Quarterly reports include information on Stormwater Management System and details on the bidding climate and possible cost increase)
- B. RBOC: Acquiring consultant to examine expected performance of complete projects.
- C. SFPUC: Staff Report: Environmental Justice
- D. SFPUC: Power Enterprise and Clean Power SF Update
- E. SFPUC: Mountain Tunnel Site Tour

- F. SFPUC: State Federal Loan Updates
- G. SFPUC: Oceanside Wastewater Plant Tour
- H. RBOC: Discussion on the 2015 report, entitled “Evaluation of Lessons Learned from the WSIP Program,” procedures and reporting processes taken from WSIP applied to SSIP
- I. SFPUC: Wastewater System Improvement Program Update
- J. RBOC: Discussion on the coordination of PUC Site Tours
- K. SFPUC: Water Infrastructure Update (April, 2022)
- L. SFPUC: Bond Issuance Update (April, 2022)
- M. RBOC: Audit process, confidentiality, and procedure

10. **Adjournment**

The meeting adjourned at 11:02 a.m.

*N.B. The Minutes of this meeting set forth all actions taken by the Revenue Bond Oversight Committee on the matters stated but not necessarily in the chronological sequence in which the matters were taken up.*

Approved by the RBOC: DRAFT.



### Agenda Item Information

Each item on the agenda may include: 1) Department or Agency cover letter and/or report; 2) Public correspondence; 3) Other explanatory documents. For more information concerning agendas, minutes, and meeting information, such as these documents, please contact RBOC Clerk, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102 – (415) 554-5184.

Audio recordings of the meeting of the Revenue Bond Oversight Committee are available at: [http://sanfrancisco.granicus.com/ViewPublisher.php?view\\_id=97](http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=97)

For information concerning San Francisco Public Utilities Commission please contact by e-mail [RBOC@sfgov.org](mailto:RBOC@sfgov.org) or by calling (415) 554-5184.

### Meeting Procedures

Public Comment will be taken before or during the Committee’s consideration of each agenda item. Speakers may address the Committee for up to three minutes on that item. During General Public Comment, members of the public may address the Committee on matters that are within the Committee’s jurisdiction and are not on the agenda.

Procedures do not permit: 1) persons in the audience to vocally express support or opposition to statements by Commissioners by other persons testifying; 2) ringing and use of cell phones, pagers, and similar sound-producing electronic devices; 3) bringing in or displaying signs in the meeting room; and 4) standing in the meeting room.

The ringing of and use of cell phones, pagers and similar sound-producing electronic devices are prohibited at this meeting. Please be advised that the Chair may order the removal from the meeting room of any person(s) responsible for the ringing or use of a cell phone, pager, or other similar sound-producing electronic devices.

LANGUAGE INTERPRETERS: Requests must be received at least 48 hours in advance of the meeting to help ensure availability. Contact Wilson Ng or Arthur Khoo at (415) 554-5184. AVISO EN ESPAÑOL: La solicitud para un traductor debe recibirse antes de mediodía de el viernes anterior a la reunion. Llame a Wilson Ng o Arthur Khoo (415) 554-5184. PAUNAWA: Ang mga kahilingan ay kailangang matanggap sa loob ng 48 oras bago mag miting upang matiyak na matutugunan ang mga hiling. Mangyaring tumawag kay sa (415) 554-5184.

### Disability Access

Revenue Bond Oversight Committee meetings are held at the Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, CA. The hearing rooms at the Public Utilities Commission are specified on the agenda and are wheelchair accessible. To request sign language interpreters, readers, large print agendas or other accommodations, please call (415) 554-5184. Requests made at least 48 hours in advance of the meeting will help to ensure availability.

翻譯 必須在會議前最少四十八小時提出要求  
請電 (415) 554-7719

### **Know Your Rights Under the Sunshine Ordinance**

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions, boards, councils, and other agencies of the City and County exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and that City operations are open to the people's review.

For more information on your rights under the Sunshine Ordinance (San Francisco Administrative Code, Chapter 67) or to report a violation of the ordinance, contact by mail: Sunshine Ordinance Task Force, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102; phone at (415) 554-7724; fax at (415) 554-5163; or by email at [sotf@sfgov.org](mailto:sotf@sfgov.org).

Citizens may obtain a free copy of the Sunshine Ordinance by printing San Francisco Administrative Code, Chapter 67, at <http://www.sfbos.org/sunshine>.

### **Ethics Requirements**

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the San Francisco Ethics Commission at 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 252-3100; fax (415) 252-3112; web site <http://www.sfgov.org/ethics>.

Under Campaign and Governmental Conduct Code, Section 1.127, no person or entity with a financial interest in a land use matter pending before the Board of Appeals, Board of Supervisors, Building Inspection Commission, Commission on Community Investment and Infrastructure, Historic Preservation Commission, Planning Commission, Port Commission, or the Treasure Island Development Authority Board of Directors, may make a campaign contribution to a member of the Board of Supervisors, the Mayor, the City Attorney, or a candidate for any of those offices, from the date the land use matter commenced until 12 months after the board or commission has made a final decision, or any appeal to another City agency from that decision has been resolved. For more information about this restriction, visit [sfethics.org](http://sfethics.org).

### **Lobbyist Registration and Reporting Requirements**

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100, et. seq.] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the Ethics Commission at: 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 581-3100; fax (415) 252-3112; website [www.sfgov.org/ethics](http://www.sfgov.org/ethics).



**PUBLIC UTILITIES  
REVENUE BOND OVERSIGHT COMMITTEE  
CITY AND COUNTY OF SAN FRANCISCO  
MINUTES - DRAFT**

**REMOTE MEETING**

**March 8, 2022 - 9:00 AM**

**Regular Meeting**

**Remote Access to Information and Participation**

On March 17, 2020, the Board of Supervisors authorized their Board and Committee meetings to convene remotely (via Microsoft Teams) and will allow remote public comment via teleconference.

Members of the public may participate by phone or may submit their comments by email to: [RBOC@sfgov.org](mailto:RBOC@sfgov.org); all comments received will be made a part of the official record. Revenue Bond Oversight Committee agendas and their associated documents are available at: <https://sfpuc.org/about-us/boards-commissions-committees/revenue-bond-oversight-committee>

As the COVID-19 disease progresses, please visit the Board's website ([www.sfbos.org](http://www.sfbos.org)) regularly to be updated on the current situation as it affects the legislative process. For more information contact Assistant Clerk Victor Young at (415) 554-7723.

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

**1. Call to Order, Roll Call, and Agenda Changes**

Members:

- Seat 1 Ettore Leale, Chair
- Seat 2 Lars Kamp
- Seat 3 Vacant
- Seat 4 Vacant
- Seat 5 Vacant
- Seat 6 Christina Tang
- Seat 7 Reuben Holober

Chair Leale called the meeting to order at 9:02. On the call of the roll, Chair Leale and Members Kamp, Tang, and Holober were noted present. A quorum was present.

There were no agenda changes.

**2. RBOC: Findings to Allow Teleconferenced Meetings During Declared Emergency**

Proposed Motion: ADOPT FINDINGS as required by Assembly Bill 361 that 1) the Committee has considered the circumstances of the state of emergency; 2) the state of emergency continues to directly impact the ability of policy body members to meet safely in person; and 3) state or local officials continue to impose or recommend measures to promote social distancing.

Chair Leale, seconded by Tang moved to ADOPT FINDINGS as required by Assembly Bill 361 that 1) the Committee has considered the circumstances of the state of emergency; 2) the state of emergency continues to directly impact the ability of policy body members to meet safely in person; and 3) state or local officials continue to impose or recommend measures to promote social distancing.

Public Comment: None.

**The motion PASSED by the following vote:**

**Ayes: Leale, Kamp, Tang, Holober**

**Noes: None**

3. **Public Comment:** Members of the public may address the Revenue Bond Oversight Committee (RBOC) on matters that are within the RBOC’s jurisdiction but are not on today’s agenda.

Speakers:

Lois Scott stated that she has become aware of the RBOC meeting and commended the RBOC for the packet and expressed concern over the RBOC sunset in 2025.

David Pilpel provided general comments and provided information on the RBOC sunset committee.

Victor Young (RBOC Clerk) informed Lois that there are vacancies on the committee that may be of interest to her if she would like to be considered for appointment.

4. **SFPUC:** Hearing on Finding #1 of the RBOC Performance Audit - update on the implementation of the recommendation to improve visibility of bond proceeds expenditures by Nancy Hom, Deputy Chief Financial Officer, SFPUC.

Irella Blackwood (SFPUC) joined the meeting, in lieu of Nancy Hom, to answer questions from the committee. Ms. Blackwood confirmed that SFPUC are identifying proper oversight developing of report is in progress. Mike Brown (SFPUC) commented stating they will be returning to RBOC with a proposal to confirm what is needed in the report for the audit.

Chair Leale confirmed: In 1-2 months, they will present template of what the report might look like, but implementation will begin at the end of the calendar year.

**Member Kamp, seconded by Member Holober, moved to Continue the Matter to May 17, 2022**

Public Comment:

David Pilpel commented on various suggestions for audit report.

**The motion PASSED by the following vote:**

**Ayes: Leale, Kamp, Tang, Holober**

**Noes: None**

5. **RBOC:** RBOC audits - Overview of process, confidentiality, procedures, and RBOC- City Services Auditor (CSA) engagement framework – Presentation by Deputy City Attorney Mark Blake.

Chair Leale attributed this agenda item to Mr. Pilpel who made a comment about the engagement framework between CSA, PUC, and RBOC.

Mark Blake (SFPUC) responded to questions from the Committee and made suggestions for next audit.

Public Comment:

David Pipel made various comments and suggestions regarding the audit and the confidentiality of the report.

**No action taken on the matter.**

6. **RBOC:** Planning for next RBOC audit - Presentation on suggested approaches by CSA and HKA/Yano.

Hunter Wang and Massanda Djohns (Office of the Controller); Paul Pocalyko (HKA) responded to questions from the Committee and gave a general overview of what is expected with the audit.

The Committee agrees that suggested including and identifying three components in report would be helpful: lesson learned, process documentation and answering the actual deliverable of the audit.

**Member Holober, seconded by Chair Leale, moved to Continue the Matter to April 19, 2022.**

Public Comment:

David Pipel provided comments about confidentiality provisions with CSA noted on the last item and questioned if there was funding and an existing arrangement.

**The motion PASSED by the following vote:**

**Ayes: Leale, Kamp, Tang, Holober**

**Noes: None**

7. **RBOC:** Planning for potential future audits to evaluate the performance of projects funded by revenue bonds.

Chair Leale suggested to move this item to the next meeting. Member Tang informed the Committee that they were unable to find someone with experience on this type of project. The Chair made suggestion to reach out to FEMA. Hunter Wang (Office of the Controller) informed the Committee that they were reaching out to the SFMTA and the SF Airport who may have experience with this type of report.

**Chair Leale, seconded by Member Tang, moved to Continue the matter to April 19, 2022.**

**The motion PASSED by the following vote:**

Public Comment:

None.

**Ayes: Leale, Kamp, Tang, Holober**

**Noes: None**

8. **SFPUC:** RBOC Member recruitment update.

The Committee discussed potential recruitments for Committee vacancies and their progress.

Public Comment:

None.

**No action taken on the matter.**

9. **SFPUC:** Site Tour planning.

Mike Brown (SFPUC) informed the Committee that Hetch Hetchy is currently only allowing virtual tours and will follow up to see when in person site tours will be allowed.

Member Holober suggested doing a site visit at Oceanside Plant. Member Kamp stated that he would like to suggest the Committee investigate local in person site tours in lieu of Hetch Hetchy. Member Tang expressed comfort in virtual site tours.

Public Comment:

None.

**No action taken on the matter.**

10. **Approval of Minutes:** February 15, 2022, Meeting Minutes.

**Member Kamp, seconded by Member Holober, moved to Continue the Matter to the April 19, 2022, meeting.**

Public Comment:

David Pipel noted that he has suggested edits to be discussed with Victor Young directly.

**The motion PASSED by the following vote:**

**Ayes: Leale, Kamp, Tang, Holober**

**Noes: None**

11. **Announcements, Comments, Questions, and Future Agenda Items.**

Upcoming Meeting Dates: April 19, 2022, May 17, 2022, June 14, 2022, and July 19, 2022.

Items for the next meeting:

- A. SFPUC: Water Infrastructure Update (April 2022)
- B. SFPUC: Bond Issuance Update (April 2022)
- C. SFPUC: Hearing on Finding #2 of the RBOC Performance Audit – Presentation on the Quality Assurance Audit Function of the Infrastructure Division, Infrastructure Division, SFPUC. (April 2022)

- D. RBOC: Planning for next RBOC audit - Presentation on suggested approaches by CSA and HKA/Yano.
- E. RBOC: Planning for potential future audits to evaluate the performance of projects funded by revenue bonds

Pending Issues:

- A. Request that SSIP Quarterly reports include information on Stormwater Management System and details on the bidding climate and possible cost increase)
- B. RBOC: Acquiring consultant to examine expected performance of complete projects.
- C. SFPUC: Staff Report: Environmental Justice
- D. SFPUC: Power Enterprise and Clean Power SF Update
- E. SFPUC: Mountain Tunnel Site Tour
- F. SFPUC: State Federal Loan Updates
- G. SFPUC: Oceanside Wastewater Plant Tour
- H. RBOC: Discussion on the 2015 report, entitled "Evaluation of Lessons Learned from the WSIP Program," procedures and reporting processes taken from WSIP applied to SSIP
- I. SFPUC: Wastewater System Improvement Program Update
- J. RBOC: Discussion on the coordination of PUC Site Tours
- K. SFPUC: Water Infrastructure Update (April 2022)
- L. SFPUC: Bond Issuance Update (April 2022)
- M. SFPUC: Hearing on Finding #2 of the RBOC Performance Audit – Presentation on the Quality Assurance Audit Function of the Infrastructure Division, Infrastructure Division, SFPUC. (April 2022)
- N. SFPUC: Hearing on Finding #1 of the RBOC Performance Audit - update on the implementation of the recommendation to improve visibility of bond proceeds expenditures by Nancy Hom, Deputy Chief Financial Officer, SFPUC.
- O. May 17, 2022.

The Committee approved the items for next meeting and confirmed the dates for future meetings: April 19, May 17, June 14, July 19, 2022.

Public Comment:

David Pipel made general comments on the future meeting dates.

## 12. Adjournment

The meeting adjourned at 11:23 a.m.

*N.B. The Minutes of this meeting set forth all actions taken by the Revenue Bond Oversight Committee on the matters stated but not necessarily in the chronological sequence in which the matters were taken up.*

Approved by the RBOC: DRAFT.



**Agenda Item Information**

Each item on the agenda may include: 1) Department or Agency cover letter and/or report; 2) Public correspondence; 3) Other explanatory documents. For more information concerning agendas, minutes, and meeting information, such as these documents, please contact RBOC Clerk, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102 – (415) 554-5184.

Audio recordings of the meeting of the Revenue Bond Oversight Committee are available at:  
[http://sanfrancisco.granicus.com/ViewPublisher.php?view\\_id=97](http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=97)

For information concerning San Francisco Public Utilities Commission please contact by e-mail [RBOC@sfgov.org](mailto:RBOC@sfgov.org) or by calling (415) 554-5184.