



San Francisco Public Utilities Commission

PROGRAMMATIC POST-ISSUANCE VERIFICATION LETTER

Water Infrastructure CRITERIA OF THE CLIMATE BONDS STANDARD

Type of engagement: Assurance Engagement

Period engagement was carried out: August – December 2023

Approved verifier: Sustainalytics

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Scope and Objectives

San Francisco Public Utilities Commission (“SFPUC”) has issued green bonds aimed at financing or refinancing projects within the Water System Improvement Program (WSIP) under a programmatic agreement with Climate Bonds Initiative (CBI) since May 2018. In 2023, SFPUC engaged Sustainalytics to review the projects financed between January 2020 and October 2023 with proceeds from the SFPUC Green Bonds (the “Nominated Projects”) and provide an assessment as to whether the Nominated Projects meet the Post-Issuance Requirements of the Climate Bonds Standard.¹

Green bonds include:²

- Water Revenue Bonds (Refunding) (Green Bonds) 2019 Series A
- Water Revenue Bonds (Green Bonds) 2020 Series A
- Water Revenue Bonds (Refunding) (Green Bonds) 2020 Series E
- Water Revenue Bonds (Green Bonds) 2023 Series C

Schedule 1 provides details of the Nominated Projects and disbursement of proceeds.

Post-Issuance Evaluation Criteria

Post-issuance Requirements of the Climate Bonds Standard Version 2.1:³

- Part A: General Requirements - All the requirements in Part A shall be met to be eligible for post-issuance certification.
- Part B: Eligible Projects & Assets - Part B requirements shall be met based on the projects & assets associated with the bond and the specified eligibility criteria.
- Part C: Requirements for Specific Bond Types - Part C requirements shall be met to be eligible for post-issuance certification and are used selectively, depending on the type of bond in question.

¹ Pre-Issuance Verification Letter available at: <https://sfpuc.org/about-us/reports/debt-management-and-disclosure-reports>

² Water Enterprise Green Bonds Annual Report available here: <https://sfpuc.org/about-us/reports/debt-management-and-disclosure-reports>

³ Climate Bond Initiative, Climate Bond Standard v2.1 at: <https://www.climatebonds.net/climate-bonds-standard-v21-0>

Issuing Entity's Responsibility

SFPUC is responsible for providing accurate information and documentation relating to the details of projects, including description, total development cost of each project and disbursed amounts.

Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of the SFPUC Green Bonds to provide an independent opinion on its conformance with the Post-Issuance Requirements of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by SFPUC with respect to the Nominated Projects. Sustainalytics is not responsible nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein due to incorrect or incomplete data provided by SFPUC.

Sustainalytics makes all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight over this assessment.

Verifier's Responsibility

Sustainalytics conducted the verification in accordance with the Climate Bonds Standard Version 2.1 and with International Standard on Assurance Engagements 3000 (ISAE 3000).

The work undertaken as part of this engagement included conversations with relevant SFPUC employees and review of relevant documentation to assess conformance of the SFPUC Green Bonds with the Post-Issuance Requirements of the Climate Bonds Standard Version 2.1.

Exceptions

No exceptions were identified. All projects meet the Post-Issuance Requirements of the Climate Bonds Standard Version 2.1 and the Water Infrastructure criteria.

Conclusion

Based on the limited assurance procedures conducted and evidence obtained, nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the allocation of the following SFPUC Green Bonds, issued to fund eligible green water infrastructure, is not in conformance with the Post-Issuance Requirements of the Climate Bonds Standard:

- USD 503,395,531 from 2019 Series A
- USD 179,240,330 from 2020 Series A
- USD 244,360,324 from 2020 Series E
- USD 528,315,241 from 2023 Series C

Detailed Findings

Eligibility Criteria	Procedure Performed	Factual Findings	Error or Exceptions Identified
Compliance to Part A: General Requirements	Verification of 104 projects funded by the Green Bonds: 2019 Series A; 2020 Series A and E; and 2023 Series C to determine if Part A: General Requirements were met (See Schedules 2A and 2B).	All 104 projects reviewed complied with the General Requirements.	None
Compliance to Part B: Eligible Projects & Assets	Verification of 104 projects funded by the Green Bonds: 2019 Series A; 2020 Series A and E; and 2023 Series C to determine if projects fall into (i) one of the investment areas of the Climate Bonds Taxonomy; and (ii) meet the Water Infrastructure technical criteria.	All 104 projects fall under the Water Infrastructure criteria and meet the requirements of the Water Infrastructure technical criteria.	None

Compliance to Part C: Requirements for Specific Bond Types	Bond Type Applicable: Use of Proceeds Revenue Bond.	The requirements of Project Holding, Settlement Period and Earmarking have been met.	None
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Schedule 1: Overview of Nominated Projects

San Francisco Public Utilities Commission Green Series Snapshot (as of 30 October 2023)	
2019 Series A Projects (Refunding)	
Project	Total Bond Amount (USD)
Calaveras Dam Replacement	84,520,102
New Irvington Tunnel	77,819,684
Crystal Springs Ps & Cs-sa PI	52,277,372
Bdpl Reliability Upgrade - Tunnel	49,576,450
Htwtpl Long Term Improvements	33,809,324
Seismic Bdpl @ Hayward Fault Ph 2	25,108,430
Habitat Reserve Program	24,311,999
San Antonio Backup Pipeline	21,334,584
Regional Groundwater Storage & Recovery	21,231,931
Sutro Res - Rehab/Seismic Upgrade	16,804,090
SVWTP Expansion/Treated Water Reservoir	16,078,187
Peninsula Pipeline Seismic Upgrade	15,082,622
San Francisco Groundwater Supply	14,081,939
Bdpl Reliability - Pipeline	10,074,720
Bond/Commercial Paper Expense	9,166,636
Crystal Springs PI #2 Replace (In City)	8,485,386
Lake Merced Pump Station Upgrade	3,165,312
Security Systems Upgrades	3,082,496
Tesla Treatment Facility	2,972,943
San Joaquin Pipeline System	2,533,233
Upper Alameda Creek Filter Gallery	1,938,123
Bdpl No 3&4 Cross Connection	1,744,840
Forest Hill Pump Station Upgrade	1,440,834
Lower Crystal Springs Dam Improvements	1,054,983
Other WSIP Projects ⁴	5,699,311
2019 Series A Total	503,395,531
2020 Series A Projects	
Calaveras Dam Replacement	128,314,499
Regional Groundwater Storage	18,947,007
San Francisco Groundwater Supply	9,894,369
Watershed Environmental Improve Program	6,114,895
Upper Alameda Creek Filter Gallery	5,861,839
Bond/Commercial Paper Expense	5,330,495
Recycled Water Project	1,235,569

⁴ Other WSIP Projects include eligible projects with less than 2% of total net proceeds allocated from 2019 Series A.

San Joaquin Water System Improve Projects	906,823
Peninsula Water System Improve Projects	890,392
Habitat Reserve Program	520,593
Lake Merced Water Level Res	471,183
Sunol Valley Water System I	427,921
Lake Merced Pump Station Upgrade	108,468
Bay Division Pipeline Upgrade	105,867
Buildings and Grounds – Region	85,283
SvwtP Expansion Treated Water	14,820
Rehab of Existing San Joaquin	7,594
Security System Upgrades	1,317
San Antonio Pump Station Upgrade	836
Bdpl Reliability Upgrade	560
2020 Series A Total	179,240,330
2020 Series E Projects (Refunding)	
Calaveras Dam Replacement	81,915,938
HtwtP Long Term Improvements	36,759,511
Regional Groundwater Storage & Recovery	23,606,542
Crystal Springs Ps & Cs-Sa Pl	14,878,591
Seismic Bdpl @ Hayward Fault Ph 2	11,695,244
Peninsula Pipeline Seismic Upgrade	11,070,354
Bdpl Reliability Upgrade - Tunnel	10,850,022
San Francisco Groundwater Supply	10,664,500
New Irvington Tunnel	9,577,496
Habitat Reserve Prgram	5,814,189
San Antonio Backup Pipeline	5,780,212
Sutro Res - Rehab/Seismic Upgrade	5,287,199
Bond/Commercial Paper Expense	3,386,148
San Joaquin Pipeline System	2,355,904
Bdpl Reliability - Pipeline	1,779,839
Security Systems Upgrades	1,642,173
Upper Alameda Creek Filter Gallery	1,355,066
Lake Merced Pump Station Upgrade	936,562
Bay Division Pipeline Upgrade	729,357
Crystal Springs Pl #2 Replace (In City)	670,891
SvwtP Expansion/Treated Water Reservoir	531,013
Vegetation Restoration Wsip Sites	520,689
Peninsula Water System Improvements	473,950
Other WSIP Projects ⁵	2,078,934
2020 Series E Total	244,360,324
2023 Series C Projects	
Hetch Hetchy Water Treatment Plant	132,430
Co2 Pipeline Replacement	80,552
Utility Water System Pumps	30,293
Bond/Commercial Paper Expense	8,482,115
Revenue Bond Oversight Committee	7,838
Lake Merced Water Level Restoration	1,026,516
San Francisco Groundwater Supply	15,880,740

⁵ Other WSIP Projects include eligible projects with less than 1% of total net proceeds allocated from 2020 Series E.

Regional Groundwater Storage & Recovery	22,793,500
Recycled Water Project	1,398,348
Harding Park Recycled Water Project	404,250
Recycled Water Project - Eastside	264,394
Vehicle Service & Facility Upgrade	465,307
North University Mound System Upgrade	1,149,570
Fire Protection At Cdd	215,695
Crocker Amazon Pump Station Upgrade	433,566
Summit Res Reahb/Seismic Upgrade	1,423,099
Key Motorized/Other Critical Valves	1,416,930
Lake Merced Pump Station Upgrade	5,267,715
Sunset Circulation Improvements	625,220
Lincoln Way Transmission Line	1,679,050
Noe Valley Transmission Main Ph2	644,696
La Grande Tank Reahb/Seismic Upgrade	794,317
East/West Transmission Main	3,493,017
Fulton&6Th 30" Main Replacement	602,004
Forest Hill Tank Rehab/Seismic Upgrade	378,011
Hunters Point Res Rehab/Seismic Upgrade	91,767
Forest Hill Pump Station Upgrade	775,357
Forest Knolls Pump Station Upgrade	724,652
Lincoln Park Pump Station Upgrade	526,435
Mclaren Park Pump Station Upgrade	3,287,532
Mount Davidson Pump Station Upgrade	495,710
Palo Alto Pump Station Upgrade	734,416
Sky Veiw/Aqua Vista Pump St Upgrades	601,787
Summit Pump Station Upgrade	839,094
Mclaren #1 Tank Rehab/Seismic Upgrade	600,223
Potrero Heights Tank Reahb/Upgrade	76,985
Forest Knolls Tank Reahb/Upgrade	397,253
Lincoln Park Tank Reahb/Seismic Upgrade	333,728
Mclaren #2 Tank Reahb/Seismic Upgrade	573,621
Mount Davidson Tank Rehab/Upgrade	298,902
Stanford Heights Res Rehab/Upgrade	2,834,747
Potrero Heights Res Rehab/Upgrade	869,203
Sutro Res - Rehab/Seismic Upgrade	12,151,715
Le Grande Pump Station Upgrade	195,698
Potrero Heights Pump Station Upgrade	77,997
Vista Francisco Pump Station Upgrade	576,103
Bdpl #1&2 Repair Of Caisson/Pipe Bridge	126,592
Upper Alameda Creek Filter Gallery	2,330,738
Seismic Upgrade Bdpl @ Hayward Fault	3,022,233
Seismic Bdpl @ Hayward Fault Ph 2	19,506,552
Lower Crystal Springs Dam Improvements	1,775,146
Standby Power Fac Various Locations	1,508,329
New Crystal Springs Bypass Tunnel	8,420,243
Adit Leak Repairs (Cs/Calv Res)	362,763
Sunset Res - Upgrade/Rehab North Basin	7,944,217
New Irvington Tunnel	47,483,039

Alameda Siphon #4	4,179,289
Sunol Quarry Reservoirs	10,100
Inlet/Outlet Work - Pulgas Balancing Ph1	226,197
Discharge Channel Mods-Pulgas Phase 2	353,804
Structural Rehab (Roof) - Pulgas Phase 3	998,797
Laguna Creek Sedimentation - Pulgas Ph 4	67,745
Existing Dechlor Mods - Pulgas Phase 5	313,711
Water System Automation (Hetch Hetchy)	26,543
Instalation Of Scada System Ph li	1,043,273
Security Systems Upgrades	2,690,397
Lawrence Livermore Water Quality Improve	473,674
Cross Conection Controls	506,408
HtwtP Short Term Improvements Ph A	376,102
HtwtP Phase 2	178,396
HtwtP Phase 3	2,105,362
HtwtP Long Term Improvements	37,749,714
Peninsula Pipeline Seismic Upgrade	15,782,471
Bdpl Reliability Upgrade - Tunnel	34,717,794
Bdpl Reliabilty - Pipeline	14,808,030
Relocation Of Bdpl 1 & 2	345,239
Capuchino Valve Lot Capacity Improv	365,593
Pipeline Repair & Readiness Improvements	646,465
Crystal Springs Ps & Cs-Sa Pl	38,221,122
U Mound Res - Upgrade (North Basin)	3,953,114
San Joaquin Pipeline System	7,105,797
Rehab Existing San Joaquin Pipelines	2,291,810
Calaveras Dam Replacement	98,297,236
Calaveras Reservoir Upgrades	210,715
San Antonio Backup Pipeline	15,123,038
Mountain Tunnel Lining (Hetchy)	4,881
Early Intake Res /Adj Weir (Hetchy)	11,051
Crystal Springs Pl #2 Replace (In City)	5,318,692
San Andreas #3 Pipeline Installation	2,954,179
Bdpl No 3&4 Cross Connection	2,511,754
SvwtP Expansion/Treated Water Reservoir	10,856,068
SvwtP Calaveras Road Improvements	6,192
SvwtP New Pipeline	14,173
SvwtP Treated Water Reservoirs	656,133
Foothill Tunnel Repairs (Hetchy)	4,400
Tesla Treatment Facility	11,449,570
San Antonio Pump Station Upgrade	1,224,661
Tesla Portal Disinfection Station	141,619
Environmental Impact Project (Peir)	190,386
Habitat Reserve Program	15,254,307
Vegetation Restoration Wsip Sites	834,437
Sfpuc/Ebmud Intertie	1,002,111
Baden And San Pedro Valve Lot	2,502,116
Program Management Services - Wsip	513,375
Bdpl#4 Slip Lining - Pccp	239,913

Watershed Environmental Improve Program	604,889
Bay Division Pipeline Upgrade	39,827
Peninsula Water System Improvements	52,577
San Joaquin Water Sys Improve Projects	12,280
Sunol Valley Water System Improvements	22,020
Puc Revenue Bond Oversight Committee	93,184
Forest Hill Tank Rehab/Seismic Upgrade	378,011
Hunters Point Res Rehab/Seismic Upgrade	91,767
Other WSIP Projects ⁶	560
2023 Series C Total	528,785,019

Schedule 2A: Post-Issuance General Requirement of the Climate Bonds Standard

Nominated Projects & Assets	<p>4.1 Statement on the environmental objectives of the bond</p> <p>4.2 Nominated Projects meet the Climate Bonds criteria</p> <p>4.3 Confirmation that Nominated Projects and Assets will not be nominated to other Climate Bonds</p>
Use of Proceeds	<p>5.1 Net Proceeds of the bond allocated to the Nominated Projects</p> <p>5.2 Funds allocated to Nominated Projects within 24 months of issuance of the bond</p> <p>5.3 Estimate of the share of the Net Proceeds used for financing and re-financing</p> <p>5.4 Net Proceeds of the bond shall be tracked by the Issuer following a formal internal process</p> <p>5.5 Net Proceeds of the bond shall be no greater than the total investment or the total Fair Market Value of the Nominated Projects & Assets at the time of issuance</p>
Non-Contamination of Proceeds	<p>6.1 Tracking of proceeds</p> <p>6.2 Managing of unallocated proceeds</p> <p>6.3 In the case of a Force Majeure, the Issuer may apply to the Climate Bonds Standard Board for an extension to the asset allocation period</p>
Confidentiality	<p>7.1 Information about the Nominated Projects & Assets provided to the Verifier and to the Climate Bonds Standard Board</p> <p>7.2 Issuer should disclose information about the bond and the Nominated Projects & Assets to the market</p>
Reporting Post-Issuance	<p>8.1 Report containing the list of Nominated Projects & Assets to which proceeds of the bond have been allocated</p>

⁶ Other WSIP Projects include eligible projects with less than 1% of total net proceeds allocated from 2023 Series C.

Schedule 2B: Conformance to the Post-Issuance Requirements of the Climate Bonds Standard

Procedure Performed	Factual Findings	Error or Exceptions Identified
Verification of Nominated Projects & Assets	<p>4.1 The objective of the bond is to primarily use proceeds to finance or refinance projects within the Water System Improvement Program (WSIP).</p> <p>4.2 SFPUC's management confirms that the Nominated Projects meet the Eligibility Criteria.</p> <p>4.3 SFPUC's management confirms that the projects shall not be nominated to other Certified Climate Bonds unless distinct portions of the Nominated Projects and Assets are being funded by different Certified Climate Bonds or that the existing Certified Climate Bond is being refinanced via another Certified Climate Bond.</p>	None
Verification of requirements specified under Use of Proceeds	<p>5.1 Net Proceeds of the bonds have been allocated to the 87 Nominated Projects.</p> <p>5.2 SFPUC's management has confirmed that funds have been allocated to Nominated Projects within 24 months of the issuance.</p> <p>5.3 The shares of the Net Proceeds used for financing and re-financing are: USD 503,395,531 from 2019 Series A (Refunding) USD 160,183,631 from 2020 Series A (Refunding) USD 244,360,324 from 2020 Series E (Refunding)</p> <p>5.4 SFPUC's management has confirmed that Net Proceeds of the bonds has been tracked by the Issuer following a formal internal process.</p> <p>5.5 SFPUC's management has confirmed that the Net Proceeds of the bonds is no greater than the total investment in the Nominated Projects or the Total Development Cost of the Nominated Projects.</p>	None
Verification of requirements specified under Non-Contamination of Proceeds	<p>6.1 SFPUC's management confirms that the proceeds have been segregated and tracked in a systematic manner and were exclusively used to finance Nominated Projects.</p> <p>6.2 SFPUC's management confirms that pending the investment of proceeds, they have be held in temporary investment instruments (i) that are cash, or cash equivalent instruments, within a Treasury function; or (ii) that do not include</p>	None

	greenhouse gas intensive projects which are inconsistent with the delivery of a low carbon and climate resilient economy.	
	6.3 N/A	
Verification of requirements specified under Confidentiality	<p>7.1 SFPUC's management confirms that all relevant information about the Nominated Projects has been provided to the Verifier and to the Climate Bonds Standard Board to support the assessment of conformance with the Climate Bonds Standard.</p> <p>7.2 SFPUC's management confirms that all relevant information about the bonds and the Nominated Projects has been disclosed to the market.</p>	None
Verification of requirements specified under Reporting Post-Issuance	8.1 SFPUC's management has provided a report containing the list of Nominated Projects to which proceeds of the bond have been allocated (See Schedule 1).	None

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The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 1500 staff members, including more than 500 analysts with varied multidisciplinary expertise across more than 40 industry groups.

For more information, visit www.sustainalytics.com

Or contact us contact@sustainalytics.com



San Francisco Public Utilities Commission

PROGRAMMATIC POST-ISSUANCE VERIFICATION LETTER

WATER INFRASTRUCTURE CRITERIA OF THE CLIMATE BONDS STANDARD

Type of engagement: Assurance Engagement

Period engagement was carried out: September 2019

Approved verifier: Sustainalytics

Contact address for engagement: 125 Maiden Lane, Suite 602, New York NY 10038, U.S.A.

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Scope and Objectives

In 2016 and 2017, San Francisco Public Utilities Commission ("SFPUC") issued green bonds aimed at financing or refinancing projects within the Water System Improvement Program (WSIP). In September 2019, SFPUC engaged Sustainalytics to review the projects funded through the issued green bonds and provide an assessment as to whether the projects met the Post-Issuance Requirements (Part A, Part B and Part C) of the Climate Bonds Standard.¹

Green bonds include:²

- Water Revenue Bond 2016 Series C (Green Bonds)
- Water Revenue Bonds 2017 Series A (Green Bonds)
- Water Revenue Bonds (Refunding) (Green Bonds) 2017 Series D
- Water Revenue Bonds (Refunding) (Green Bonds) 2017 Series G

Schedule 1 provides details of the green bond projects and Disbursement of Proceeds.

Compliance Evaluation Criteria

Post-issuance requirements under Climate Bonds Standards Version 2.1:

- Part A: General Requirements - All the requirements in Part A shall be met to be eligible for post-issuance certification.
- Part B: Eligible Projects & Assets - Part B requirements shall be met based on the projects & assets associated with the bond and the specified eligibility criteria.
- Part C: Requirements for Specific Bond Types - Part C requirements shall be met to be eligible for post-issuance certification and are used selectively, depending on the type of bond in question.

Issuing Entity's Responsibility

SFPUC is responsible for providing accurate information and documentation relating to the details of the projects that have been funded, including description of projects, total development cost of each projects, and disbursed amounts.

Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of SFPUC's green bond, issued to finance eligible projects, and provided an

¹ Pre-Issuance Verification Letter available here:

https://www.climatebonds.net/files/files/Verification%20Letter_SFPUC_WSIP.pdf

² Water Enterprise Green Bonds Annual Report available here:

<https://www.sfwater.org/modules/showdocument.aspx?documentid=13671>

independent opinion informing SFPUC as to the conformance of the green bond with the Post-Issuance requirements and Water Infrastructure criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by SFPUC with respect to the Nominated Projects. Sustainalytics is not responsible nor shall it be held liable if any of the opinions, findings, or conclusions it has set forth herein are not correct due to incorrect or incomplete data provided by SFPUC.

Sustainalytics makes all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight over the assessment of the bond.

Verifier's Responsibility

Sustainalytics conducted the verification in accordance with the Climate Bonds Standard Version 2.1 and with International Standard on Assurance Engagements 3000 (ISAE 3000) – Assurance Engagements other than Audits or Reviews of Historical Information.

The work undertaken as part of this engagement included conversations with relevant SFPUC employees and review of relevant documentation to confirm the conformance of SFPUC's green bonds with the Programmatic Post-Issuance Requirements (Part A, Part B and Part C) of the Climate Bonds Standard Version 2.1.

Exceptions

No exceptions were identified.

All projects aligned with the Post-Issuance requirements of the Climate Bonds Standard and were in conformance to the Water Infrastructure criteria.

Conclusion

Based on the limited assurance procedures conducted, nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the allocation of the following SFPUC green bonds, issued to fund eligible green water enterprise projects, is not in conformance with the Post-Issuance requirements of the Climate Bonds Standard:

- USD 256,821,634 from 2016 Series C
- USD 125,500,000 from 2017 Series A
- USD 335,588,236 from 2017 Series D
- USD 26,744,612 from 2017 Series G

Detailed Findings

Eligibility Criteria	Procedure Performed	Factual Findings	Error or Exceptions Identified
Compliance to Part A: General Requirements	Verification of 87 projects by the 2016 Water Series C and 2017 Water Series A, D and G green bonds to determine if Part A: General Requirements were met (See Schedule 2A and 2B).	All 87 projects reviewed complied with the General Requirements.	None
Compliance to Part B: Eligible Projects & Assets	Verification of 87 projects funded by the green bond in 2016 Water Series C and 2017 Water Series A, D and G green bonds to determine if projects fall into (i) one of the investment areas of the Climate Bonds Taxonomy (ii) meet the Water Infrastructure technical criteria.	All 87 projects fall under the Water Infrastructure criteria and meet the requirements of the Water Infrastructure technical criteria.	None

Compliance to Part C: Requirements for Specific Bond Types	Bond Type Applicable: Use of Proceeds Bond.	The requirements of Project Holding, Settlement Period and Earmarking have been met.	None
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Schedule 1: Detailed Overview of Nominated Projects and Assets

San Francisco Public Utilities Commission Green Series Snapshot (as of June, 2018)	
2016 Series C Projects	
Project ³	Total Bond Amount
1. Groundwater Storage and Recovery	\$9,752,541
2. Upper Alameda Creek Filter Gallery	\$1,856,862
3. Seismic Upgrade of BDPL at Hayward Fault	\$3,181,724
4. New Crystal Springs Bypass Tunnel	\$170
5. Adit Leak Repairs	\$19,471,358
6. New Irvington Tunnel	\$3,534,658
7. Alameda Siphon #4	\$74,987
8. Security System Upgrades	\$1,225,367
9. HTWTP Long Term Improvements	\$35,659,426
10. BDPL Reliability Upgrade-Trans Bay Tunnel	\$83,385,032
11. BDPL Reliability Upgrade-Pipeline	\$42,522,804
12. Calaveras Dam Replacement	\$32,848,192
13. San Antonio Backup Pipeline	\$41,041
14. Program Environmental Impact Report	\$66,883
15. Mitigation Planning	\$1,155,323
16. Vegetation Restoration WSIP Sites	\$32,940
17. Habitat Reserve Program	\$18,914,745
18. EBMUD Intertie	\$173
19. Program Management Services	-
20. Watershed Environmental Improvement Program	-
21. WSIP Financing Costs Project	\$3,084,618
22. Peninsula Pipeline Seismic Upgrade	\$1,109
23. Crystal Springs/San Andreas Transmission Upgrade	\$11,682
2016 Series C Total	\$256,821,634
2017 Series A Projects	
24. Regional Groundwater Storage & Recovery	\$11,831,464
25. Recycled Water Project - Eastside	\$19,703

³ Eligible projects include all WSIP Projects, subset only listed

26. Lake Merced Pump Station Upgrade	\$630,939
27. Sutro Res - Rehab/Seismic Upgrade	\$23,855
28. Seismic BDPL @ Hayward Fault Ph 2	\$4,345,357
29. New Irvington Tunnel 4,792,673	\$4,792,673
30. Security Systems Upgrades	\$2,069,680
31. HTWTP Long Term Improvements	\$18,158,415
32. Peninsula Pipeline Seismic Upgrade	\$321,836
33. BDPL Reliability Upgrade - Tunnel	\$1,282,153
34. BDPL Reliability - Pipeline	\$259,886
35. Crystal Springs Ps & Cs-Sa PI	\$51,297
36. San Joaquin Pipeline System	163,320
37. Calaveras Dam Replacement	73,965,437
38. San Antonio Backup Pipeline	83,650
39. Habitat Reserve Program	2,349,645
40. Vegetation Restoration WSIP Sites	21,163
41. Watershed Environmental Improve Program	532,628
42. Bay Division Pipeline Upgrade	1,589,685
43. Peninsula Water System Improvements	2,098,561
44. San Joaquin Water System Improve Projects	490,141
45. Sunol Valley Water System Improvements	878,913
46. Alameda Creek Recapture Project	-
47. Other WSIP Projects ⁴	8,177
2017 Series A Total	\$125,500,000
2017 Series D Projects (Refunding)	
WSIP Financing Costs Project	\$ 6,186,666
Lake Merced Water Level Restoration	\$76,065
San Francisco Groundwater Supply	\$5,861,124
Regional Groundwater Storage & Recovery	\$11,662,612
Recycled Water Project	\$224,619
Harding Park Recycled Water Project	\$397,958
Recycled Water Project - Eastside	\$403,721
Lake Merced Pump Station Upgrade	\$2,337,855
East/West Transmission Main	\$28,069
Forest Hill Pump Station Upgrade	\$1,112,242
Forest Knolls Pump Station Upgrade	\$7,470
Mclaren Park Pump Station Upgrade	\$5,353
Sutro Res - Rehab/Seismic Upgrade	\$11,590,033
Le Grande Pump Station Upgrade	\$45,522
Upper Alameda Creek Filter Gallery	\$1,142,093
Seismic Bdpl @ Hayward Fault Ph 2	\$17,176,100
Lower Crystal Springs Dam Improvements	\$815,302
New Crystal Springs Bypass Tunnel	\$20,647
Sunset Res - Upgrade/Rehab North Basin	\$17,096

⁴ Other WSIP Projects include eligible projects with less than 1% of total net proceeds allocated from 2017 Series A

New Irvington Tunnel	\$57,937,418
Alameda Siphon #4	\$631,907
Structural Rehab (Roof) - Pulgas Phase 3	\$181,583
Existing Dechlor Mods - Pulgas Phase 5	\$89,584
Installation Of Scada System Ph II	\$249,506
Security Systems Upgrades	\$2,120,548
Lawrence Livermore Water Quality Improve	\$10,107
HTWTP Long Term Improvements	\$20,044,784
Peninsula Pipeline Seismic Upgrade	\$8,758,742
BDPL Reliability Upgrade - Tunnel	\$35,714,358
BDPL Reliability - Pipeline	\$7,502,792
Crystal Springs Ps & Cs-Sa PI	\$36,587,850
U Mound Res - Upgrade (North Basin)	\$147,093
San Joaquin Pipeline System	\$1,618,466
Rehab Existing San Joaquin Pipelines	\$96,453
Calaveras Dam Replacement	\$48,044,405
San Antonio Backup Pipeline	\$14,976,671
Crystal Springs PI #2 Replace (In City)	\$6,524,771
San Andreas #3 Pipeline Installation	\$53,518
BDPL No 3&4 Cross Connection	\$1,330,315
SVWTP Expansion/Treated Water Reservoir	\$12,423,360
Tesla Treatment Facility	\$2,208,334
San Antonio Pump Station Upgrade	\$14,076
Habitat Reserve Program	\$17,745,619
Vegetation Restoration WSIP Sites	\$585,228
SFPUC/EBMUD Intertie	\$80,161
Baden And San Pedro Valve Lot	\$86,134
Watershed Environmental Improve Program	\$687,129
Other WSIP Projects ⁵	\$26,780
2017 Series D Total	\$335,588,236
2017 Series G Projects (Refunding)	
WSIP Financing Costs	\$495,370
Lake Merced Water Level Restoration	\$5,683
San Francisco Groundwater Supply	\$150,924
Regional Groundwater Storage & Recovery	\$394,643
Recycled Water Project	\$27,564
Harding Park Recycled Water Project	\$48,825
Recycled Water Project - Eastside	\$47,845
Lake Merced Pump Station Upgrade	\$254,280
Forest Hill Pump Station Upgrade	\$135,593
Sutro Res - Rehab/Seismic Upgrade	\$1,010,822
Le Grande Pump Station Upgrade	\$5,586
Upper Alameda Creek Filter Gallery	\$37,483
Seismic BDPL @ Hayward Fault Ph 2	\$1,451,902
Lower Crystal Springs Dam Improvements	\$99,659
New Irvington Tunnel	\$6,441,819

⁵ Other WSIP Projects include eligible projects with less than 1% of total net proceeds allocated from 2017 Series D (Refunding)

Alameda Siphon #4	\$77,519
Structural Rehab (Roof) - Pulgas Phase 3	\$22,283
Existing Dechlor Mods - Pulgas Phase 5	\$10,993
Installation Of Scada System Ph II	\$30,618
Security Systems Upgrades	\$183,153
HTWTP Long Term Improvements	\$681,830
Peninsula Pipeline Seismic Upgrade	\$228,439
BDPL Reliability Upgrade - Tunnel	\$3,610,135
BDPL Reliability - Pipeline	\$834,831
Crystal Springs Ps & Cs-Sa PI	\$3,364,069
University Mound Res - Upgrade (North Basin)	\$18,050
San Joaquin Pipeline System	\$99,222
Rehab Existing San Joaquin Pipelines	\$10,081
Calaveras Dam Replacement	\$851,556
San Antonio Backup Pipeline	\$1,391,486
Crystal Springs PI #2 Replace (In City)	\$788,021
San Andreas #3 Pipeline Installation 6,567	\$6,567
BDPL No 3&4 Cross Connection 157,346	\$157,346
SVWTP Expansion/Treated Water Reservoir	\$1,517,992
Tesla Treatment Facility	\$244,012
Habitat Reserve Program	\$1,865,984
Vegetation Restoration WSIP Sites	32,319
SFPUC/EBMUD Intertie	\$9,837
Baden And San Pedro Valve Lot	\$10,570
Watershed Environmental Improve Program	\$73,839
Other WSIP Projects ⁶	\$15,865
2017 Series G Total	\$26,744,612
Green Series Totals	\$744,654,482

⁶ Other WSIP Projects include eligible projects with less than 1% of total net proceeds allocated from 2017 Series G (Refunding)

Schedule 2A: Post-Issuance General Requirements of the Climate Bonds Standard

Nominated Projects & Assets	<p>4.1 Statement on the environmental objectives of the bond</p> <p>4.2 Nominated Projects meet the Climate Bonds criteria</p> <p>4.3 Confirmation that Nominated Projects and Assets will not be nominated to other Climate Bonds</p>
Use of Proceeds	<p>5.1 Net Proceeds of the bond allocated to the Nominated Projects</p> <p>5.2 Funds allocated to Nominated Projects within 24 months of issuance of the bond</p> <p>5.3 Estimate of the share of the Net Proceeds used for financing and re-financing</p> <p>5.4 Net Proceeds of the bond shall be tracked by the Issuer following a formal internal process</p> <p>5.5 Net Proceeds of the bond shall be no greater than the total investment or the total Fair Market Value of the Nominated Projects & Assets at the time of issuance</p>
Non-Contamination of Proceeds	<p>6.1 Tracking of proceeds</p> <p>6.2 Managing of unallocated proceeds</p> <p>6.3 In the case of a Force Majeure, the Issuer may apply to the Climate Bonds Standard Board for an extension to the asset allocation period</p>
Confidentiality	<p>7.1 Information about the Nominated Projects & Assets provided to the Verifier and to the Climate Bonds Standard Board</p> <p>7.2 Issuer should disclose information about the bond and the Nominated Projects & Assets to the market</p>
Reporting Post-Issuance	<p>8.1 Report containing the list of Nominated Projects & Assets to which proceeds of the bond have been allocated</p>

Schedule 2B: Conformance to the Post-Issuance Requirements of the Climate Bonds Standard

Procedure Performed	Factual Findings	Error or Exceptions Identified
Verification of Nominated Projects & Assets	<p>4.1 The objective of the bond is to primarily use proceeds to finance or refinance projects within the Water System Improvement Program (WSIP).</p> <p>4.2 SFPUC's management confirms that the nominated projects meet the Eligibility Criteria.</p> <p>4.3 SFPUC's management confirms that the projects shall not be nominated to other Climate Bonds.</p>	None
Verification of requirements specified under Use of Proceeds	<p>5.1 Net Proceeds of the bond have been allocated to the 87 Nominated Projects.</p> <p>5.2 SFPUC's management has confirmed that funds have been allocated to Nominated Projects within 24 months of the issuance.</p> <p>5.3 The shares of the Net Proceeds used for financing and re-financing are: USD 256,821,634 from 2016 Series C <i>(29,441,077 remain unallocated)</i> USD 125,500,000 from 2017 Series A <i>(fully allocated)</i> USD 335,588,236 from 2017 Series D (Refunding) USD 26,744,612 from 2017 Series G (Refunding)</p> <p>5.4 SFPUC's management has confirmed that Net Proceeds of the bond has be tracked by the Issuer following a formal internal process.</p> <p>5.5 SFPUC's management has confirmed that the Net Proceeds of the bond is no greater than the total investment in the Nominated Projects or the Total Development Cost of the Nominated Projects.</p>	None
Verification of requirements specified under Non-Contamination of Proceeds	<p>6.1 SFPUC's management confirms that the proceeds have been segregated and tracked in a systematic manner and were exclusively used to finance Nominated Projects.</p> <p>6.2 SFPUC's management confirms that pending the investment of proceeds, they have be held in temporary investment instruments (i) that are cash, or cash equivalent instruments, within a Treasury function; or (ii) that do not include greenhouse gas intensive projects which are inconsistent with the delivery of a low carbon and climate resilient economy.</p>	None

Verification of requirements specified under Confidentiality	<p>6.3 N/A</p> <p>7.1 SFPUC's management confirms that all relevant information about the Nominated Projects has been provided to the Verifier and to the Climate Bonds Standard Board to support the assessment of conformance with the Climate Bonds Standard.</p> <p>7.2 SFPUC's management confirms that all relevant information about the bond and the Nominated Projects has been disclosed to the market.</p>	None
Verification of requirements specified under Reporting Post-Issuance	<p>8.1 SFPUC's management has provided a report containing the list of Nominated Projects to which proceeds of the bond have been allocated (See Schedule 1).</p>	None

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