

Public Utilities Commission of the
City and County of San Francisco

Water Enterprise

Green Bonds Annual Report

For Fiscal Year Ending
June 30, 2017



Services of the San Francisco Public Utilities Commission

Photo: WSIP Habitat Reserve Program, Alameda, Ca.

Introduction

This annual green bonds spending report provides project spending details on the projects funded by the following bond issuance of the Water Enterprise of the Public Utilities Commission of the City and County of San Francisco (SFPUC):

- **Water Revenue Bonds Series 2016 C (Green Bonds)**

The SFPUC is a department of the City and County of San Francisco and provides drinking water to the City of San Francisco and wholesale water agencies located in three Bay Area counties, wastewater services to the City of San Francisco, and green hydroelectric and solar power to retail customers and the City's municipal departments. The SFPUC's Water Enterprise operates and maintains the municipal drinking water supply, storage and distribution system for retail customers in the City of San Francisco, to certain retail customers outside of the City, and to wholesale customers in three San Francisco Bay Area counties. The Water Enterprise consists of water treatment and distribution facilities located outside of the City (the Regional Water System) and water treatment and distribution facilities located inside the City (the Local Water System).

Green Bonds Certified Infrastructure Projects

SFPUC has identified the projects included in the Water System Improvement Program (WSIP) to be Green Projects. The proceeds of the 2016 Series C Bonds will be applied to finance and refinance WSIP projects.

The Water System Improvement Program (WSIP) is a \$4.845 billion program consisting of 87 capital projects to repair, replace, and upgrade critical portions of the Regional Water System and the Local Water System to meet specific level of service goals and objectives for seismic reliability, delivery reliability, water quality and water supply in an environmentally sustainable manner.

As of June 30, 2017, the WSIP is approximately 95% complete with construction finished on 34 local projects and 39 regional projects along the Hetch Hetchy Regional Water System to ensure reliable water delivery to its 2.7 million customers.

Local Program

The WSIP Local Program includes 35 projects (excluding 5 Water Supply Projects) that are located within the city limits of San Francisco and only benefit city residents. (As of July 1, 2011, management and implementation of the Water Supply Projects were transferred from the WSIP Local Program to the Water Enterprise Capital Improvement Program.) These projects, which are typically smaller in size than the larger Regional Projects, include improvements to existing in-City distribution pipelines, storage reservoirs/tanks, pump stations, and miscellaneous facilities.

Regional Program

The Regional Program includes 52 projects that benefit both San Francisco residents and the 27 Wholesale Customers. These projects, which are typically much larger and located mostly outside San Francisco limits, are referred to as “Regional Projects.” They include a wide variety of improvements such as upgrades to and the addition of new treatment, transmission (pipelines, tunnels, pump stations), and storage (dams and reservoirs) facilities spread over seven different counties (Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo, and San Francisco). The cost of the Regional Projects is incorporated in the rates paid by both Retail Customers and Wholesale Customers. The Regional Program is further divided into the following categories of projects:

San Joaquin Regional Projects. These projects are designed to improve water delivery reliability by augmenting three existing transmission pipelines that transmit the Hetch Hetchy water supply across the San Joaquin Valley, and enhance water quality by building the Tesla Disinfection Facility, a new advanced disinfection/treatment facility for the SFPUC’s largest source of supply.

Sunol Valley Regional Projects. The projects within this region are designed to address delivery and seismic vulnerabilities associated with the delivery of Hetch Hetchy water through the Sunol Valley and water originating from the Alameda Watershed. Projects include the construction of a new Calaveras Dam, a fourth Alameda Siphon, a new Irvington Tunnel, in addition to the existing tunnel, and other connecting large-diameter pipelines, as well as upgrades to the existing Sunol Valley Water Treatment Plant and San Antonio Pump Station. All of these facilities are within or in close proximity to the Calaveras Fault influence zone.

Bay Division Regional Projects. The projects within this region address the seismic vulnerability of the four Bay Division Pipelines, which transmit the blend of Hetch Hetchy and Sunol Valley water across the San Francisco Bay to the Peninsula and serve a large number of Wholesale Customers. The projects in this region address the crossing of the Hayward Fault and system vulnerability associated with the close proximity of the San Andreas Fault; and add system redundancy and operational flexibility.

Peninsula Regional Projects. The projects within this region are generally designed to address facility seismic vulnerabilities, and meet water quality and delivery goals for the Crystal Springs, San Andreas and Pilarcitos Reservoirs. Projects include the construction of a new Crystal Springs Bypass Tunnel and large-diameter pipelines, as well as upgrades to the existing Harry Tracy Water Treatment Plant, the Pulgas

Balancing Reservoir, and the Lower Crystal Springs Dam. All these facilities are located within the San Andreas Fault influence zone.

San Francisco Regional Projects. The projects within this region include the seismic retrofit of the Sunset and University Mound Terminal Reservoirs, and a groundwater storage and recovery project. The two reservoir projects are located within the City but can be used to supply water back to the Northern Peninsula, which can benefit the Wholesale Customers. The groundwater project includes improvements in both San Mateo and San Francisco counties.

Support Projects (formally System Wide Region). In July 2011, the System Wide Region was re-named as Support Projects. These projects include (1) system security upgrades, which involves the development and integration of security components at critical water system facilities, (2) the PEIR, which was prepared in compliance with CEQA to identify and analyze potential programmatic environmental impacts of the proposed system improvements, (3) the Watershed Environmental Improvement Program, which consists of conservation easements and/or fee title purchase of property from willing landowners to permanently protect Alameda Creek Watershed lands, (4) the Bioregional Habitat Restoration project (formerly Habitat Reserve Program), which is intended to provide a coordinated and consolidated approach to compensate for habitat impacts that would result from the implementation of the WSIP projects in the San Joaquin, Sunol Valley, Bay Division and Peninsula Regions of the Regional Water System, (5) Vegetation Restoration of WSIP Construction Sites, which was added to the Program in March 2014 to provide maintenance, monitoring and reporting of onsite habitat restoration installed at the various WSIP construction sites, and (6) Regional Program management.

Green Bond Spending Details

The SFPUC retained an independent third-party consultant, Sustainalytics, to review and verify that the Water Series 2016C bonds meet the requirements of the Climate Bonds Initiative (CBI) Water Bonds Standard. The proceeds from the green bond issuance are separately tracked and allocated to designated eligible projects. Bond fund spending by eligible project is detailed below in Table 1.

**Table 1: Green Bond Proceeds Spending Detail
As of June 30, 2017**

Water Series 2016C

Bond Closing Date: December 14, 2016

Project*	Budget	Expended in FY16-17	Remaining Budget
Groundwater Storage and Recovery	\$8,364,951	\$0	\$8,364,951
Upper Alameda Creek Filter Gallery	6,302,420	-	6,302,420
Seismic Upgrade of BDPL at Hayward Fault	3,181,724	-	3,181,724
New Crystal Springs Bypass Tunnel	170	170	-
Adit Leak Repairs	19,471,358	19,471,358	-
New Irvington Tunnel	3,534,658	-	3,534,658
Alameda Siphon #4	74,987	-	74,987
Security System Upgrades	1,225,367	-	1,225,367
HTWTP Long Term Improvements	35,659,426	33,445,456	2,213,970
BDPL Reliability Upgrade-Trans Bay Tunnel	83,385,032	81,563,568	1,821,464
BDPL Reliability Upgrade-Pipeline	42,522,804	41,944,520	578,284
Calaveras Dam Replacement	32,848,192	-	32,848,192
San Antonio Backup Pipeline	41,041	-	41,041
Program Environmental Impact Report	66,883	-	66,883
Mitigation Planning	1,155,323	-	1,155,323
Vegetation Restoration WSIP Sites	32,940	-	32,940
Habitat Reserve Program	12,140,308	12,000,000	140,308
EBMUD Intertie	173	173	-
Program Management Services	1,581,090	-	1,581,090
Watershed Environmental Improvement Program	5,232,789	-	5,232,789
Total	\$256,821,634	\$188,424,245	\$68,396,389

**Eligible projects include all WSIP Projects,
subset only listed*

Attachment:

1. Sustainalytics Report, September 2016

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