RATES SCHEDULES & FEES

for Water Power and Sewer Service

Effective with meter readings made on or after July 1, 2014



Every day, the San Francisco Public Utilities Commission (SFPUC) delivers high quality water, generates clean energy, and protects public health and the environment by collecting and treating wastewater for the residents and businesses of San Francisco. Our system works 24 hours a day, 7 days a week, and its operation and maintenance are funded by your water and wastewater rates.

In May 2014, the Commission approved four years of water and wastewater service rate increases and two years of retail municipal power service rate increases, beginning July 1, 2014. These rate increases will allow the SFPUC to continue work to rebuild and improve our water and wastewater and power systems.

The approved rates will result in an average increase of \$7-10 per month for the average single-family residential household in San Francisco (about 8-9% per year). This represents an increase from about \$1.00 per person per day for water and wastewater service, to about \$1.30 per person per day in 2018. In 2018, this will be less than three pennies per gallon for water delivery and wastewater treatment.

For customers whose meters are read on a bi-monthly basis, the monthly service charges will be twice the amount stated in the rate schedules.

Power Rates for Residential and Commercial Rates (R-1, R-2, R-M, C-1, M-1)

On February 8, 2011, the Commission established a schedule of rates and charges for retail residential and commercial electric service for ratepayers within Hunters Point and Treasure Island redevelopment areas. Annual rates adjustments are authorized based on the lesser of the annual percentage changes in the Consumer Price Index (CPI) or the percentage change in the Schedule E-1 rate charged by Pacific Gas & Electric Company for residential service as of January 1.

Power Rates for Municipal and Public Agencies (M-2)

On May 27, 2014, through Resolution 14-0089, the Commission approved a schedule of rates applicable to certain municipal and other public agencies currently receiving electric service at a fixed rate at or below cost of service. The approved rates are applicable through FY 2015-16.

Power Rates for Municipal and Public Agencies Rates for Enterprise Funds

SFPUC Resolution 89-0355 established that the rate to be charged to enterprise departments is to be based on the comparable PG&E rate. These rates are updated periodically to reflect rate changes adopted by PG&E.

Water and Wastewater rates established by resolutions: 14-0070, 14-0071, 14-0072, 14-0073 and 14-0074 Approved May 13, 2014, 14-0140 Approved August 12, 2014 and 15-0040 Approved February 10, 2015 by the Public Utilities Commission.

Power rates established by resolutions: 10-0018 Approved February 9, 2010, 11-0021 Approved February 8, 2011 14-0089 Approved May 27, 2014 and 15-0112 Approved May 12, 2015 by the Public Utilities Commission.

Updated July 1, 2015

Some highlights detailed in the pages of this booklet include:

Single-Family Residential water and wastewater rates have 2 tiers. Tier 1 has been set for the first 4 Ccf, up from 3 Ccf previously, for single-family residential customers to represent average water consumption for this customer class. Single-Family Residential wastewater tiers will be phased into a uniform rate over the next 4 years.

Multi-Family Residential water rates have 2 tiers and will be given a multiplier based on the number of dwelling units at the service address. Tier 1 has been set for the first 3 Ccf for Multi-Family Residential customers to represent average water consumption for this customer class. Multi-Family Residential wastewater tiers will be phased into a uniform rate over the next 4 years.

Non-Residential (Commercial) water rates have a uniform rate. Non-Residential wastewater rates have a uniform rate for volume plus per pound strength charges. Fire Service customers will be charged a fixed monthly service charge based on the size of their service.

Rate Calculator link:

For further information and to calculate your rates, visit www.sfwater.org/rates. Reference your most recent bill to obtain your meter size and water use (Ccf per month).

Sign up for My Account to see your water usage at myaccount.sfwater.org.

Visit our website, <u>www.sfwater.org/conserve</u> to learn more about water, wastewater and power rates and to learn ways you can save water and save money through our water conservation programs.

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WATER RATES SCHEDULES

SCHEDULE W-1A: Single Family Residential Service within the City and County of San Francisco

Applicable to single-family dwelling units served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Single-Family Residential	Charge per Ccf			
	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
First 4 Units ¹ /DU ² /Month All Additional Ccf/DU/Month	\$4.86 \$6.52	\$5.45 \$7.31	\$6.00 \$8.05	\$6.42 \$8.62

¹1 Unit = 1 Ccf of water = 748 gallons

 $^{^2\}mathrm{DU}$ = Dwelling Unit; All Single-Family Residential customers have one dwelling unit per account

SCHEDULE W-1B: Multiple-Family Residential Service within the City and County of San Francisco

Applicable to multiple-family accounts consisting of two or more dwelling units served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Multiple-Family	Charge per Ccf			
Residential	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
First 3 Units ¹ /DU ² /Month	\$4.98	\$5.58	\$6.14	\$6.57
All Additional Ccf/DU/Month	\$6.67	\$7.48	\$8.23	\$8.81

¹1 Unit = 1 Ccf of water = 748 gallons

²DU = Dwelling Unit

SCHEDULE W-1C: Commercial, Industrial and General Uses within the City and County of San Francisco

Applicable to commercial, industrial and other general uses served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Commercial, Industrial	Charge per Ccf			
and other General Uses	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
For all units ¹ of Water	\$5.79	\$6.49	\$7.14	\$7.64
¹ 1 Unit = 1 Ccf of water = 748 gallons				

SCHEDULE W-2: Fire Service within the City and County of San Francisco

Applicable to private fire service installed and maintained according to the rules, regulations and specifications of the San Francisco Water Enterprise:

First: A Monthly Service Charge based on the size of the service.

Service Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
1 in	\$7.77	\$8.71	\$9.59	\$10.36
1-1/2 in	\$11.30	\$12.66	\$13.93	\$15.05
2 in	\$15.54	\$17.41	\$19.16	\$20.70
3 in	\$25.44	\$28.50	\$31.35	\$33.86
4 in	\$39.57	\$44.32	\$48.76	\$52.67
6 in	\$74.90	\$83.89	\$92.28	\$99.67
8 in	\$117.30	\$131.38	\$144.52	\$156.09
10 in	\$166.76	\$186.78	\$205.46	\$221.90
12 in	\$308.09	\$345.07	\$379.58	\$409.95

Second: If water is used for any purpose other than extinguishing accidental fires, the W-1C rates for all water delivered based on monthly reading shall apply.

SCHEDULE W-3A: Public Uses within the City and County of San Francisco

Applicable to Public Buildings, Parks and Other Metered Service: Schedule W-1C.

For Street Sprinkling and Flushing when quantities are computed from records of tank wagons and billed as one amount: Schedule W-1C (no service charge to apply).

SCHEDULE W-3B: Interruptible Uses within the City and County of San Francisco

Applicable to interruptible service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Second: A charge for all water delivered based on monthly meter reading.

Interruptible Uses	Charge per Ccf FYE 2015			
For all units ¹ of Water	\$5.25	\$5.88	\$6.47	\$6.93
¹ 1 Unit = 1 Ccf of water = 748 gallons				

Restrictions on Landscape Irrigation: On Aug. 12, 2014 the SFPUC, through Resolution No. 14-0140, imposed mandatory restrictions on outdoor irrigation of ornamental landscapes or turf with potable water by retail customers of at least 10%, at two times the applicable water rate. On Feb. 10, 2015, through Resolution No. 15-0040, the SFPUC adopted the rules and regulations for the Interruptible Service program, effective July 1, 2015, applicable to retail irrigation customers who opt-in to the program.

SCHEDULE W-4: Docks & Shipping Supply within the City and County of San Francisco

Applicable to special shipping service, including hose truck and other special services, from open docks through common hydrants where delivery is not through a service and meter for which the customer is responsible:

First: A Docks & Shipping Connection Fee: Schedule W-44.

Docks & Shipping	Charge per Ccf			
	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
For all units ¹ of Water	\$7.64	\$8.57	\$9.43	\$10.10
¹ 1 Unit = 1 Ccf of water = 748 gallons				

SCHEDULE W-5: Builders & Contractors within the City and County of San Francisco

Builders and Contractors supply for metered service through the fire hydrants and other metered service:

First: A Builders & Contractors Connection Fee: Schedule W-44.

Second: A Meter Rental Deposit: Schedule W-44.

Third: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17

Fourth: A charge for all water delivered based on monthly meter reading.

Builders & Contractors	Charge per Ccf			
	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
For all units ¹ of Water	\$6.95	\$7.79	\$8.57	\$9.17
¹ 1 Unit = 1 Ccf of water = 748 gallons				

Fifth: Any customer who fails to report water consumption as required shall be assessed a non-reporting penalty equivalent to the cost of 25 units of water per month at the current W-5 volumetric rate.

SCHEDULE W-21: Single Family Residential Service outside the City and County of San Francisco

Applicable to single-family dwelling units served through a separate meter or bank of meters: Schedule W-1A.

SCHEDULE W-22: Fire Service outside the City and County of San Francisco

Applicable to private fire service installed and maintained according to the rules, regulations and specifications of the San Francisco Water Enterprise: Schedule W-2.

SCHEDULE W-24: Non-Potable Water Service

Applicable inside and outside the City and County of San Francisco for untreated water service when the customer furnishes all facilities necessary to convey the untreated water from the San Francisco Water Enterprise's water supply reservoirs to the customer's point of use:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Second: A charge for all water delivered based on monthly meter reading.

Non-Potable	Charge per Ccf			
	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
For all units ¹ of Water	\$2.24	\$2.51	\$2.76	\$2.95
¹1 Unit = 1 Ccf of water = 748 gallons				

SCHEDULE W-25: Wholesale Use with Long-Term Contract

For service to municipalities, water districts and others who, under long-term contracts, purchase water for resale:

First: A Monthly Service Charge based on the type and size of the meter.

Meter Size	Disc/ Compound Meters	Crest Meters	Magnetic Meters	Turbine Meters
5/8 in	\$11.00	-	-	-
3/4 in	\$18.00	-	-	-
1 in	\$30.00	-	-	-
1-1/2 in	\$43.00	-	-	-
2 in	\$79.00	-	-	-
3 in	\$158.00	-	-	-
4 in	\$318.00	\$353.00	-	\$577.00
6 in	\$476.00	\$685.00	-	\$1,256.00
8 in	\$635.00	\$1,335.00	\$2,265.00	\$1,875.00
10 in	\$793.00	\$1,732.00	-	\$3,391.00
12 in	\$953.00	\$1,840.00	\$5,159.00	-
16 in	\$1,270.00	\$5,628.00	-	\$7,215.00
18 in	-	\$6,133.00	-	-
20 in	-	\$6,349.00	-	-

The service charge for a battery of meters installed on one service in lieu of one meter, or for a special type of meter, shall be based on the size of single or multiple standard type meters of equivalent capacity.

SCHEDULE W-25 (Continued)

Second: A Charge for Water Delivered based on monthly meter readings.

\$1,633.50 per acre-foot

or

\$3.75 per 100 cu. ft.

Third: An Untreated Wholesale Water Rate Discount Factor for Wholesale Customers receiving untreated water, based on monthly meter readings.

\$(161.17) per acre-foot

or

\$(0.37) per 100 cu. ft.

SCHEDULE W-31: Commercial, Industrial and General Uses outside the City and County of San Francisco

Applicable to multiple-family residential, commercial, industrial and other general uses served through a separate meter or bank of meters: Schedule W-1C.

SCHEDULE W-33: Public Uses Excluding Wholesale outside the City and County of San Francisco

Applicable to Public Buildings, Parks and Other Metered Service: Schedule W-1C.

SCHEDULE W-34: Interruptible Uses outside the City and County of San Francisco

Applicable to interruptible service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise: Schedule W-3B.

WASTEWATER RATES SCHEDULES

SCHEDULE A-1: This schedule shall apply to Single-Family Residential wastewater customers. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Single-Family Residential wastewater customers shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

Single-Family	Charge per Ccf				
Residential	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17	
First 4 Discharge Units ¹ / DU ² /Month	\$9.06	\$9.82	\$10.84	\$12.40 ³	
All Additional Ccf/DU/Month	\$11.23	\$11.34	\$11.66	\$12.40 ³	

¹1 Discharge Unit = 1 Ccf of wastewater = 748 gallons

A discharge unit shall be based on the customer's metered water use multiplied by the customer's flow factor representing the quantity of metered water use returned to the sewerage system as wastewater (e.g. a customer using 10 Ccf of water and having a flow factor of 90% shall be billed for 9 discharge units). For customers whose meters are read on a bi-monthly basis, the allowed use in each block shall be doubled.

 $^{^2\}mbox{DU}$ = Dwelling Unit; All Single-Family Residential customers have one dwelling unit per account

³In FYE 2018, Tier 1 and Tier 2 will be a uniform rate for all wastewater discharge units

SCHEDULE A-2: This schedule shall apply to Multiple-Family Residential wastewater customers. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Multiple-Family Residential wastewater customers shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

Multiple-Family	Charge per Ccf				
Residential	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17	
First 3 Discharge Units ¹ / DU ² /Month	\$9.24	\$9.95	\$10.91	\$12.40³	
All Additional Ccf/DU/Month	\$11.48	\$11.51	\$11.75	\$12.40 ³	

¹1 Discharge Unit = 1 Ccf of wastewater = 748 gallons

A discharge unit shall be based on the customer's metered water use multiplied by the customer's flow factor representing the quantity of metered water use returned to the sewerage system as wastewater (e.g. a customer using 10 Ccf of water and having a flow factor of 95% shall be billed for 9.5 discharge units). The use allowed in each block shall be multiplied by the number of dwelling units to maximum use allowed in the block (e.g. a customer with 5 dwelling units shall be allowed a maximum of 15 discharge units in the first block – 3 Ccf/Dwelling Units per month times 5 Dwelling Units = 15 Ccf/mo.) For customers whose meters are read on a bi-monthly basis, the allowed use in each block shall be doubled.

²DU = Dwelling Unit

³In FYE 2018, Tier 1 and Tier 2 will be a uniform rate for all wastewater discharge units

SCHEDULE B: Customers other than, Residential Wastewater customers charged under Schedule A-1 and A-2 of this Resolution shall be charged the cost for each parameter according to the following:

Non-Residential	Charge per Ccf				
	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17	
Volume per Discharge Unit ^{1,2}	\$6.145	\$6.453	\$6.904	\$7.664	
PLUS Chemical Oxygen Demand (COD) per lb.	\$0.440	\$0.462	\$0.494	\$0.548	
PLUS Total Suspended Solids (TSS) per lb	\$0.828	\$0.870	\$0.931	\$1.033	
PLUS Oil and Grease (O/G) per lb.	\$0.867	\$0.911	\$0.974	\$1.082	

¹1 Discharge Unit = 1 Ccf of wastewater = 748 gallons

Those customers whose parameter loadings are not based on periodic sampling shall be charged on the basis of standard parameter loadings established by the General Manager for each SIC code in accordance with applicable state and federal laws and regulations.

²Applicable to the volume of wastewater discharged in accordance with the rules and regulations of the Wastewater Enterprise

CAPACITY CHARGES

Section 4: Water Capacity Charge

A. Any customer requesting a new connection to the water distribution system, or requiring additional capacity as a result of any addition, improvement, modification or change in use of an existing connection to the water distribution system, shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Water System. Customers subject to payment of water capacity charges after July 1, 2015, shall pay the charges in accordance with the following table:

FYE 2016 Water Capacity Charge Schedule

Meter Size	Charges
5/8 in	\$1,276
3/4 in	\$1,914
1 in	\$3,192
1-1/2 in	\$6,381
2 in	\$10,211
3 in	\$19,145
4 in	\$31,908
6 in	\$63,819
8 in	\$102,110
10 in	\$146,706
12 in	\$274,277
16 in	\$478,391

- B. The capacity charge shall be adjusted on July 1st of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.
- C. Customers subject to payment of the water capacity charge shall receive a prior use credit equal to the equivalent charge for the prior usage without regard to any time limit for such credit.

- D. Customers subject to payment of the water capacity charge shall pay 100% of the charge prior to issuance of the applicable building permit. Any plan changes will result in a revised capacity charge payment.
- E. Assessment of the applicable capacity charge will be based on the date that the General Manager receives the final permit application and building plans.
- F. If full payment of all fees and charges is not received in accordance with the General Manager's payment requirements, the new or additional water services will not be authorized.

Section 5: Wastewater Capacity Charge

A. Any customer requesting a new connection to the Sewerage System, or requiring additional collection or treatment capacity as a result of any addition, improvement, modification or change in use of an existing connection to the Sewerage System, shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Wastewater System. Customers subject to payment of wastewater capacity charges after July 1, 2015, shall pay the charges in accordance with the following tables:

FYE 2016 Wastewater Capacity Charge Schedule

Meter Size	SIC 2	SIC 3	SIC 4	SIC 5	SIC 6
5/8 in	\$3,436	\$4,199	\$4,343	\$4,186	\$3,738
3/4 in	\$5,154	\$6,298	\$6,514	\$6,280	\$5,606
1 in	\$8,590	\$10,497	\$10,857	\$10,466	\$9,344
1-1/2 in	\$17,179	\$20,994	\$21,715	\$20,932	\$18,688
2 in	\$27,487	\$33,591	\$34,744	\$33,492	\$29,900
3 in	\$51,538	\$62,982	\$65,145	\$62,797	\$56,063
4 in	\$85,897	\$104,971	\$108,574	\$104,662	\$93,439
6 in	\$171,793	\$209,941	\$217,148	\$209,323	\$186,877
8 in	\$274,869	\$335,906	\$347,437	\$334,917	\$299,004
10 in	\$395,125	\$482,864	\$499,441	\$481,443	\$429,818
12 in	\$738,711	\$902,746	\$933,738	\$900,090	\$803,573
16 in	\$1,288,450	\$1,574,558	\$1,628,613	\$1,569,924	\$1,401,580

Meter Size	SIC 7	SIC 8	SIC 9	SIC 10	SIC 11
5/8 in	\$4,893	\$5,121	\$5,376	\$5,080	\$10,924
3/4 in	\$7,339	\$7,682	\$8,064	\$7,620	\$16,387
1 in	\$12,232	\$12,803	\$13,440	\$12,700	\$27,311
1-1/2 in	\$24,464	\$25,607	\$26,878	\$25,401	\$54,622
2 in	\$39,142	\$40,971	\$43,005	\$40,641	\$87,395
3 in	\$73,392	\$76,820	\$80,635	\$76,203	\$163,865
4 in	\$122,320	\$128,034	\$134,392	\$127,005	\$273,109
6 in	\$244,639	\$256,068	\$268,784	\$254,009	\$546,217
8 in	\$391,423	\$409,709	\$430,055	\$406,414	\$873,948
10 in	\$562,671	\$588,957	\$618,204	\$584,221	\$1,256,300
12 in	\$1,051,950	\$1,101,094	\$1,155,772	\$1,092,239	\$2,348,734
16 in	\$1,834,796	\$1,920,512	\$2,015,882	\$1,905,068	\$4,096,630

- B. The capacity charge shall be adjusted on July 1st of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.
- C. Customers subject to payment of the wastewater capacity charge shall receive a prior use credit equal to the equivalent charge for the prior usage without regard to any time limit for such credit.
- D. Customers subject to payment of the wastewater capacity charge shall pay 100% of the charge prior to issuance of the applicable building permit. Any plan changes will result in a revised capacity charge payment.
- E. Assessment of the applicable capacity charge will be based on the date that the General Manager receives the final permit application and building plans.
- F. If full payment of all fees and charges is not received in accordance with the General Manager's payment requirements, the new or additional wastewater services will not be authorized.

WATER SERVICE CONNECTION & MISCELLANEOUS FEES

SCHEDULE W-40: Meter Resizing

Applicable to all water customers for meter resizing made at the customer's request except when such resizing is required to maintain service pressure or meet flow requirements:

CHARGE TYPE	FYE 2016 Effective 7/1/15
Decrease from existing 2" and smaller service pipes	\$1,540
Increase from 2" copper service, to 1 1/2" or 2" meter	\$1,540
Increase from 3/4" copper service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,540
Increase from 1" copper or plastic service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,540
Reset on meter with existing 2" or smaller copper or plastic service	\$1,170

The Customer Service Bureau shall investigate a request for meter resizing and determine whether a meter size change is warranted based on the current fixture count for the property being served, and that the service will deliver adequate flow to support the meter size required.

All requests for meter decrease for services 3" and larger will be transmitted to the City Distribution Division for an estimate of the costs of resizing the meter. The estimate will be either for the cost to resize the metering device or for the installation of a new service based on the age, location, and meter configuration of the existing service.

For meter resizing not covered in the above or when, as determined by the General Manager, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the General Manager may require payment on the basis of actual costs.

SCHEDULE W-41: Service Installations

Applicable to all water customers for service installations made at the customer's request:

Water Installation Service Charges For Single Services

Size	ТҮРЕ	FYE 2016 Effective 7/1/15
1 in	Standard Service	\$9,090
1 -1/2 in	Standard Service	\$12,770
2 in	Standard Service	\$12,770
3 in	Standard Service	\$36,520
4 in	Standard Service	\$36,520
6 in	Standard Service	\$42,870
8 in	Standard Service	\$49,150
1 -1/2 in	Fire Service	\$12,160
2 in	Fire Service	\$12,160
4 in	Fire Service	\$24,000
6 in	Fire Service	\$28,430
8 in	Fire Service	\$32,610
1 in	Combination Service	\$9,090
1 -1/2 in	Combination Service	\$12,770
2 in	Combination Service	\$12,770
1 in	Non-Standard Service	\$9,090
1 -1/2 in	Non-Standard Service	\$12,770
2 in	Non-Standard Service	\$12,770

SCHEDULE W-41: Service Installations (Continued)

Applicable to all water customers for service installations made at the customer's request:

Water Installation Service Charges For Multiple Services

Size	ТҮРЕ	FYE 2016 Effective 7/1/15	
		Primary	Secondary
1 in	Standard Service	\$7,430	\$3,620
1 -1/2 in	Standard Service	\$8,880	\$4,860
2 in	Standard Service	\$8,880	\$4,860
3 in	Standard Service	\$37,950	\$31,090
4 in	Standard Service	\$37,950	\$31,090
6 in	Standard Service	\$44,730	\$37,950
8 in	Standard Service	\$51,340	\$44,140
1 -1/2 in	Fire Service	\$9,910	\$5,870
2 in	Fire Service	\$9,910	\$5,870
4 in	Fire Service	\$24,580	\$17,910
6 in	Fire Service	\$29,260	\$22,580
8 in	Fire Service	\$33,780	\$27,070
1 in	Combination Service	\$7,430	\$3,620
1 -1/2 in	Combination Service	\$8,880	\$4,860
2 in	Combination Service	\$8,880	\$4,860
1 in	Non-Standard Service	\$7,430	\$3,620
1 -1/2 in	Non-Standard Service	\$8,880	\$4,860
2 in	Non-Standard Service	\$8,880	\$4,860

The charge for setting each additional meter on an existing or new service for residential and small commercial use and the charge for resetting a meter on an existing usable service shall be established in the same manner as above.

For installations not covered in the above or when, in the opinion of the General Manager, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the General Manager may require payment on the basis of actual costs.

All pipes, valves, fittings, equipment, materials, meters, any other facilities, up to and including the outlet equipment, shall remain the property of the Water Enterprise, and no part of the cost will be refunded.

SCHEDULE W-42: Meter and Service Relocations

Applicable to all water customers for meter and service relocations made at the customer's request. The City Distribution Division shall establish the new location of the meter:

CHARGE TYPE	FYE 2016 Effective 7/1/15
Relocation of meter no more than 2 feet on existing 2" copper service	\$3,550
Relocation of meter no more than 2 feet on existing 1" copper or plastic service	\$2,160

If the General Manager determines that the relocation of an active meter and/or service connection is required because of the operations of the Water Enterprise or because of modifications to a street or right-of-way by a public agency, the relocation will be done without cost to the customer.

If the meter or service to be relocated is not active, the General Manager may elect to sever the service connection and remove the meter without relocating it. If the customer requests the relocation or removal for any purpose and such request is approved by the General Manager, the customer shall pay the greater of the standard charge as described above or the actual cost incurred by the Water Enterprise.

For relocations not covered in the above, or when the General Manager determines that unusual conditions may result in costs more than 15% greater than the scheduled costs, the General Manager may require payment of the actual costs of the relocation.

SCHEDULE W-43: Flow Restricting Installations

Applicable to all water customers:

Violation of any water use restrictions by any customer may, after one written warning and in accordance with all applicable laws and legal restrictions, result in the installation of a flow restrictor device on the customer service line. The charge to install and remove the restricting device shall be as follows:

CHARGE TYPE	FYE 2016 Effective 7/1/15	
5/8 in - 1 in	\$252	
1 1/2 in - 2 in	\$353	
3 in or larger Actual cost for customization ¹		
¹ Flow Restricting Installations for meters 3" and larger are charged actual cost including materials, labor, equipment, and applicable overhead charges.		

Continued violation of any water use restrictions may result in the discontinuance of water service by the Enterprise and a charge of \$51 shall be paid prior to reactivating the service.

SCHEDULE W-44: Service Fees

Except as noted, the following service fees are applicable to all water customers except wholesale customers.

LATE PAYMENT PENALTY

Any charge or fee not paid within 30 days shall be subject to a late payment penalty equal to one-half of one percent (1/2%) for each 30 days or fraction thereof on the amount owed. This late payment penalty shall also apply to wholesale customers.

RETURN CHECK CHARGE

\$99.00

A return check charge shall be applied to any account whose check payment is returned due to insufficient funds, closed accounts or any other reason why the customer's bank did not honor the check. This charge will be made for every such occurrence.

NEW ACCOUNT CHARGE

\$59.00

Any customer establishing a new account for water service shall be assessed a one-time fee to cover administrative costs. In addition, such customer may be required to make a refundable security deposit equal to the greater of two months estimated water charges or \$59. The deposit is refundable after twelve months of satisfactory payment history or termination of service and settlement of the final bill, whichever occurs first.

48-HOUR NOTICE \$51.00

Prior to shutting-off water service for non-payment, the General Manager posts notice on the customer's premises. A charge of \$51 will be added to the amount owed for water service to cover the cost of this notice.

SERVICE SHUT-OFF \$51.00

A shut-off of water service during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$51. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$56.

SERVICE TURN-ON \$51.00

A service turn-on during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$51. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$56.

LOCK CHARGE \$14.00

Any customer whose service is shut-off for non-payment may also be charged for the cost of a meter lock installed in accordance with the Water Enterprise regulations.

METER TEST

Any customer who requests to test the accuracy of their water meter will be assessed \$103 for the first test and a \$334 charge for any subsequent test within a 24-month period. If the meter is found to register more than the limit of error specified in the "Rules and Regulations Governing Water Service to Customers," the testing fee will be returned.

LIEN FEE

Any account with an outstanding balance of greater than \$50 and which is delinquent by more than one billing cycle may be recorded as a lien against the property. Any account recorded as a lien against the property will be assessed a lien fee as provided in the Administrative Code of the City and County of San Francisco.

BUILDERS & CONTRACTORS CONNECTION FEE

\$116.00

Builder and Contractor customers that connect to the system will be assessed a Builders and Contractors connection charge of \$116 to cover the administrative costs for connecting a meter.

DOCKS & SHIPPING CONNECTION FEE

\$237.00

Docks and Shipping customers that connect to the system will be assessed a Docks & Shipping connection charge to cover the administrative costs for setting up a billing account and field work to provide connecting equipment.

METER RENTAL DEPOSIT

Builder and Contractor customers that connect to the system, in addition to payment of a Builders and Contractors connection fee, shall also pay a meter deposit of \$821 for a 1" meter and \$2,772 for a 3" meter. This deposit is refundable when the account is closed.

NO-REPORTING PENALTY FEE

Builder and Contractor customers that do not bring the rented meter in for reading and testing according to the meter reading schedule, will be assessed a penalty fee equivalent to 25 units (Ccf) of water at the effective W-5 water rate per every delinquent month.

MANUAL METER-READING FEE

\$5.00

Any customer who has opted out of automatic meter reads will be assessed a manual meter-reading charge of \$5 per month to cover the cost of manual meter reading.

FOR SCHEDULES W-40 THROUGH W-44:

The General Manager may each year adjust the fees and charges in schedules W-40 through W-44, without further action by the Commission, to reflect changes in the relevant Consumer Price Index. The price index adjustment shall not cause the charges to exceed the department's cost of providing the service.

POWER RATES SCHEDULES

SCHEDULE R-1: Residential Service

Applicable to Residential Customers served through a separate meter or bank of meters:

Territory:

This schedule is available within the boundaries of the City and County of San Francisco in areas for which the San Francisco Public Utilities Commission's Power Enterprise is the primary electricity provider.

Rates:

Total bundled service charges are calculated using the total rates shown below on a monthly basis, plus any applicable taxes.

First: A monthly service charge per account.

Per Account \$2.97

Second: A charge for all electricity delivered during the Winter Season based on monthly meter readings.

For the first 278 kWh	\$0.11705/kWh
For the next 83 kWh	\$0.13306/kWh
All additional kWh	\$0.27238/kWh

Or Second: A charge for all electricity delivered during the Summer Season based on monthly meter readings.

For the first 229 kWh	\$0.11705/kWh
For the next 68 kWh	\$0.13306/kWh
All additional kWh	\$0.27238/kWh

SCHEDULE A: Annual Adjustment (applicable to schedules **R-1** and **R-2**)

Effective July 1, 2012 and each successive July 1, the rates shall be adjusted by the lesser of the annual percentage in the Consumer Price Index (CPI) for All Urban Consumers for San Francisco-Oakland-San Jose published by the U.S. Bureau of Labor Statistics (for 12 months ending December 31 in the calendar year preceding the year during which the rates will be effective) or the change in the Schedule E-1 rate by Pacific Gas and Electric for residential service as of January 1 in the year for which the rates will be effective compared to the Schedule E-1 rate as of January 1 in the prior year. In no case, however, will a reduction in CPI or in the rate charged by PG&E cause the rates charged by the SFPUC to be reduced.

SCHEDULE R-2: Low-income Residential Service

Applicable to Residential Customers served through a separate meter or bank of meters where the Residential Customer qualifies for the SFPUC Low-Income Residential Service for Water and Wastewater Low-Income Discount Programs:

Territory:

This schedule is available within the boundaries of the City and County of San Francisco in areas for which the San Francisco Public Utilities Commission's Power Enterprise is the primary electricity provider.

Rates:

Total bundled service charges are calculated using the total rates shown below on monthly basis, plus any applicable taxes.

First: A monthly service charge per account.

Per Account	\$2.97
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Second: A charge for all electricity delivered during the Winter Season based on monthly meter readings.

For the first 278 kWh	\$0.08193/kWh
For the next 83 kWh	\$0.09313/kWh
All additional kWh	\$0.19067/kWh

Or Second: A charge for all electricity delivered during the Summer Season based on monthly meter readings.

For the first 229 kWh	\$0.08193/kWh
For the next 68 kWh	\$0.09313/kWh
All additional kWh	\$0.19067/kWh

Special Conditions: (applicable to schedules **R-1** and **R-2**)

- 1. Seasonal Changes. The winter season is November 1 through April 30. The summer season is May 1 through October 31.
- 2. Standard Medical Quantities. Additional medical quantities are provided as in Schedule R-M.
- 3. Additional Meters. If a residential dwelling unit is served by more than one electric meter, the usage of all meters shall be combined for calculating the electric use in each block of the rate. No additional use will be allowed in the first and second blocks of the rate as a result of multiple meters.

- Standard Service Facilities. Except for metering equipment, which shall be supplied by the SFPUC, the customer is responsible for installing, owning, operating and maintaining all facilities required to receive service at the point of delivery.
- Special Facilities. If the customer requests the SFPUC install, own, operate
 or maintain any facilities other than the Standard Service Facilities, the
 customer will reimburse the SFPUC for all its costs associated with such
 Special Facilities.
- 6. Contracts. Customers who use service for only part of the year may be required to execute a contract for service. After the initial term, the contract shall continue for successive term of one year until cancelled by either the Customer or the SFPUC upon thirty days written notice.

SCHEDULE R-M: Medical Necessity Assistance Program

General:

Available to residential customers served by the SFPUC Power Enterprise. Under the Medical Necessity Assistance Program, the number of kilowatt-hours (kWh) of electricity billed in the initial step of the residential customer's applicable rate may be increased. To qualify for this program, the residential customer must have a full-time resident in the customer's home who has a medical disability. The Medical Necessity Use Allowance for eligible residential customers in each step of the applicable rate will be increased by seventy-five percent.

Eligibility:

To qualify for the Medical Necessity Assistance Program, a customer must submit an application and certify in writing that a full-time resident in the customer's home is:

1. Dependent on electrically powered life-support device(s) plugged into the home electric system such as an aerosol tent, pressure pad, apnea monitor, pressure pump, compressor, respirator (all types), electronic nerve stimulator, suction machine, ultrasound nebulizer, electrostatic nebulizer, inhalation pulmonary pressure breather machine (IPPB) iron lung, dialysis machine, hemodialysis machine, motorized wheelchair, or oxygen generator to sustain the life of the patient/person or to prevent deterioration of the patient/person's medical condition; or

 A paraplegic, hemiplegic, or quadriplegic, multiple sclerosis patient, neuromuscular patient, scleroderma patient, or person with a compromised immune system being treated for a life-threatening illness that requires special electrically powered heating and/or cooling to sustain the life of the patient/person or to prevent deterioration of the patient/person's medical condition.

Application for the Medical Necessity Assistance Program must include certification by a physician and surgeon licensed in the State of California, or by a person licensed by the State of California in accordance with the Osteopathic Initiative Act, that the person named in the application qualifies for the Medical Necessity Assistance Program.

Recertification:

Unless a permanent disability is demonstrated, application for the Medical Necessity Assistance Program must be submitted annually, in accordance with the rules and procedures provided by the General Manager of the SFPUC.

SCHEDULE C-1: Commercial Service

Applicable to commercial, industrial and other general non-residential customers with demands of less than 200 kW served through a separate meter or bank of meters:

Territory:

This schedule is available within the boundaries of the City and County of San Francisco in areas for which the San Francisco Public Utilities Commission's Power Enterprise is the primary electricity provider.

Rates:

Total bundled service charges are calculated using the total rates shown below on a monthly basis, plus any applicable taxes.

First: A monthly service charge per account for single phase or poly-phase service.

Per Account w/Single Phase Service	\$14.79
Per Account w/Poly-Phase Service	\$22.21

Second: A charge for all electricity delivered based on monthly meter readings.

	Winter Season	Summer Season
For all kWh	\$0.1436/kWh	\$0.20065/kWh

Special Conditions:

- 1. Seasonal Changes. The winter season is November 1 through April 30. The summer season is May 1 through October 31.
- Standard Service Facilities. Except for metering equipment, which shall be supplied by the SFPUC, the customer is responsible for installing, owning, operating and maintaining all facilities required to receive service at the point of delivery.
- Special Facilities. If the customer requests the SFPUC install, own, operate or maintain any facilities other than the Standard Service Facilities, the customer will reimburse the SFPUC for all its costs associated with such Special Facilities.
- 4. Contracts. Customers who use service for only part of the year may be required to execute a contract for service. After the initial term, the contract shall continue for successive term of one year until cancelled by either the Customer or the SFPUC upon thirty days written notice.

SCHEDULE A: Annual Adjustment (applicable to schedule **C-1**)

Effective July 1, 2012 and each successive July 1, the rates shall be adjusted by the lesser of the annual percentage in the Consumer Price Index (CPI) for All Urban Consumers for San Francisco-Oakland-San Jose published by the U.S. Bureau of Labor Statistics (for 12 months ending December 31 in the calendar year preceding the year during which the rates will be effective) or the change in the Schedule A-1 rate by Pacific Gas and Electric for residential service as of January 1 in the year for which the rates will be effective compared to the Schedule A-1 rate as of January 1 in the prior year. In no case, however, will a reduction in CPI or in the rate charged by PG&E cause the rates charged by the SFPUC to be reduced.

SCHEDULE M-1: Miscellaneous Charges

Applicable to residential and non-residential customers as appropriate:

Territory:

This schedule is available within the boundaries of the City and County of San Francisco in areas for which the San Francisco Public Utilities Commission's Power Enterprise is the primary electricity provider.

	Annual contract of the contrac		
Late Payment Penalty	Any charge or fee not paid within 30 days shall be subject to a late payment penalty equal to one-half of one percent (1/2%) for each 30 days or fraction thereof on the amount owed. This late payment penalty shall also apply to wholesale customers.		
Return Check Charge	\$89.00 per occurrence		
New Account Charge Deposit	Deposit equivalent to 2 months charges; General Manager may waive this charge upon satisfactory credit check		
Service Restoration after Disconnect	\$38.00		
Lien Fee	Set by Administrative Code		

CCA Termination Fees

Initial Implementation (4 notices; within 60 days of service start)	Fee
Residential	\$0
Non-Residential	\$O
Once Operational (after 60 days of service start)	Fee
Residential	\$5
Non-Residential	\$25

Charges:

- 1. Disconnect Notice Charge \$5.00
- 2. Document Reproduction Charge \$0.10 per page
- 3. Temporary Service Installation and Removal Fee \$296.00
- 4. Field Action Charge (Meter Disconnection and Reconnection) \$49.00
- 5. Pole or Underground Disconnections (Requiring a line crew) \$137.00
- 6. After Hours Restoration Charge (10:00pm-8:00am M-F, weekends and holidays \$99.00
- Lost, Stolen or Damaged Equipment Charge Lost, stolen or damaged SFPUC equipment will be charged to the customer at the SFPUC's actual cost, including labor, materials, overhead, etc.
- 8. Customer-requested Electric Service Charges (minimum \$44.00)

Effective July 1, 2012 and each successive July, the miscellaneous charges shall be adjusted based on the annual percentage change in the Consumer Price Index for all Urban Consumers in San Francisco-Oakland-San Jose published by U.S. Bureau of Labor Statistics for the twelve months ending December 31 in the calendar year preceding the year in which charges will be effective, with a base index as of June 30, 2009.

Any customer request for field visits outside normal operating hours, trouble-shooting problems not caused by the SFPUC equipment or service, meter testing or repairs, or any other customer-requested service not covered elsewhere in the Schedule of Charges will be billed to the customer at the SFPUC's actual cost, at the discretion of the General Manager. Such charges may include, but are not limited to labor, materials, vehicles, administrative overhead, etc.

SCHEDULE M-2: Municipal Power Service Rates

This schedule of rates, fees and charges is applicable for electric service from the SFPUC Power Enterprise to those City and County of San Francisco municipal departments and other public agencies receiving electric service at fixed rates, as initially established in SFPUC Resolution 89-0355 and amended thereafter by the SFPUC, depending upon the charge per kWh in effect for FY 2013-14, and increasing as shown through FY 2015-16.

A charge for all electricity delivered based on meter readings (or equivalent) on or after July 1 as follows:

Municipal Power Service Rates - Schedule M2	FYE 2015 Average Rates	FYE 2016 Average Rates
GUSE – rate is applicable to all General Fund Department activities and other public agencies	5.75¢/kWh	6.75¢/kWh
GUSE 2 – rate is applicable to Municipal Libraries	9.13¢/kWh	10.13¢/kWh
GUSE 3 – rate is applicable to the Moscone Convention Center facilities	7.70¢/kWh	8.70¢/kWh
GUSE 4 – rate is applicable to San Francisco General Hospital	2.70¢/kWh	3.70¢/kWh
GUSE 5 – rate is applicable to Laguna Honda Hospital	3.49¢/kWh	4.49¢/kWh
GUSE 6 – rate is applicable to Public Buildings and San Francisco City Street Lights	2.00¢/kWh	3.00¢/kWh







525 Golden Gate Avenue San Francisco, CA 94102-3220

sfwater.org

San Francisco Public Utilities Commission

Proposed Retail Water and Wastewater Rates Fiscal Years Ending 2015 to 2018 April 22, 2014



Environmental Quality Act Statement

The proposed rate adjustments are for the purpose of funding capital projects necessary to maintain service within the existing service areas, operating expenses including employee wages and fringe benefits, materials and supplies, equipment, financial reserve requirements, and other budgetary requirements of the San Francisco Public Utilities Commission. Therefore, under Section 21090(b)(8) of the State of California Natural Resource Code, environmental review of these proposed rate modifications are not required.

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Executive Summary

This report presents the San Francisco Public Utilities Commission (SFPUC) staff proposal for retail water and wastewater rates and charges for fiscal years ending in 2015 through 2018. It contains analyses of revenues, revenue requirements, rate structures and customer impacts. The rate recommendations contained in this report are based on the two-year, FYE 2015 & FYE 2016, budget adopted by the San Francisco Public Utilities Commission on February 11, 2014 and advance the priorities and policy direction reflected therein. The SFPUC does not anticipate any subsequent changes to the two-year budget that will materially impact the rate recommendations.

Since the last SFPUC water/sewer rate report in 2009, the SFPUC has made significant progress in making seismic improvements and other upgrades to its water and sewer infrastructure. With the funding provided by rate increases approved in 2009, water projects to seismically upgrade reservoirs, replace pipelines, and add new facilities have been completed with an overall completion rate of approximately 80% for the Water System Improvement Program (WSIP) as of December 2013. In the coming years, work will continue on the remaining projects that comprise the WSIP and completion is projected for 2018. The funding provided by the 2009 wastewater rate increases has enabled the SFPUC to continue work on Wastewater's capital program to address neighborhood flooding and odor issues and to begin design of phase 1 of the Sewer System Improvement Program (SSIP).

The proposed rates for the four fiscal years presented in this report are necessary to continue funding Commission-approved capital improvement programs for the Water and Wastewater Enterprises. For the average San Francisco single-family customer, the rate recommendations will mean an 8.9% average annual increase in their combined water and sewer bill during the next four years.

Staff recommendations include the following:

Water Enterprise

- Adjust water rates and charges to increase Water Enterprise revenues from water sales by an average of 12.0% in both FYE 2015 and FYE 2016, 10.0% in FYE 2017 and 7.0% in FYE 2018;
- Continue a 2-block rate structure for single-family residential (SFR) and multiple-family residential (MFR) water service;

- Within the 2-block rate structure for SFR rate, increase the size of tier 1 from 300 cubic feet per month (3 Ccf) to 400 cubic feet per month (4 Ccf) to better reflect consumption patterns. No change is proposed for MFR;
- Continue a uniform rate structure for non-residential water service;
- Revise the basis for the interruptible rate such that it now includes capital costs except those associated with reserve capacity;
- Assess capacity charges based on meter size and use the California Unified Plumbing Code to reflect ongoing conservation; and
- Continue low income assistance programs, subject to available funding.

Wastewater Enterprise

- Adjust sewer service charges to increase Wastewater Enterprise revenues received for wastewater collection and treatment by an average of 5% in both FYE 2015 and FYE 2016, 7% in FYE 2017 and 11% in FYE 2018;
- Phase out of the current 2-block rate structure for SFR and MFR wastewater service, such that there is a uniform rate structure for both SFR and MFR customer classes by FYE 2018;
- Assess capacity charges based on meter size to reflect ongoing conservation; and
- Continue low income assistance programs, subject to available funding.

San Francisco City Charter Requirements

In addition to federal and state guidelines, the City Charter (Sections 8B.125) establishes a number of goals and objectives for setting retail sewer and water rates. A summary of the major goals and objectives appears below:

- Provide sufficient revenues for the operation, maintenance and repair of the enterprise consistent with good utility practice;
- Provide sufficient revenues to improve or maintain financial condition and bond ratings at or above levels equivalent to highly-rated utilities of each enterprise;
- Meet requirements and covenants under all bond indentures;
- Set rates based on cost of service;
- Investigate and develop rate-based conservation incentives; and
- Investigate and develop affordability programs for low-income customers.

Findings and Recommendations

This rate proposal builds upon the direction provided by the Commission and the Rate Fairness Board in recent years. This proposal also reflects the analysis and recommendations from the Charted-mandated independent cost of service study, required at least every 5 years, completed by Carollo Engineers and Patricia McGovern Engineer (PME). The findings and recommendations of the independent cost of service study entitled *SFPUC Water and Wastewater Cost of Service Study* can be found in Appendix B of this report. The staff rate proposal modifies the independent consultant recommendation based on rate duration, rate adjustments in FYE 2017 and FYE 2018, and the wastewater residential rate structure. With these modifications, the staff rate proposal meets all requirements of the City Charter including providing sufficient revenues for the enterprises, meeting all covenants under bond indentures, and setting rates based on cost of service.

In the staff proposal, the inclining block rate structures for single-family and multiple-family residential water and wastewater services will continue to act as rate-based conservation incentives. Discount programs will continue, contingent upon available funding, to make utility service affordable to low-income households.

The tables and chart listed below summarize the proposed rates:

- Table 1 summarizes proposed water-service rates and charges.
- Table 2 summarizes proposed wastewater-service rates and charges.
- Table 3 summarizes proposed fire-service rates and charges.
- Chart 1 shows how much the typical SFPUC single-family residential customer currently pays on a monthly basis for water and sewer. The chart also compares that bill to bills calculated using the rates of other utilities.

Table 1Proposed Water Rates

	Current	Proposed			
	Rate	FY 2015	FY 2016	FY 2017	FY 2018
Monthly Service Charge:					
5/8 in	\$8.40	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$10.30	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$13.50	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$21.80	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$32.20	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$55.80	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$89.50	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$173.80	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$275.60	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$393.70	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$731.70	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,272.70	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24
Single-Family Residential					
First 4 Ccf/Month	\$4.20 ¹	\$4.86	\$5.45	\$6.00	\$6.42
All Additional	\$5.50 ¹	\$6.52	\$7.31	\$8.05	\$8.62

Multiple-Family Residential					
First 3 Ccf/DU ² /Month	\$4.50	\$4.98	\$5.58	\$6.14	\$6.57
All Additional	\$5.90	\$6.67	\$7.48	\$8.23	\$8.81
Non-Residential					
Commercial, Industrial, Public					
Uses	\$5.40	\$5.79	\$6.49	\$7.14	\$7.64
Interruptible	\$3.25	\$5.25	\$5.88	\$6.47	\$6.93
Docks & Shipping	\$5.40	\$7.64	\$8.57	\$9.43	\$10.10
Builders & Contractors	\$5.40	\$6.95	\$7.79	\$8.57	\$9.17

¹Current Tier 1 for first 3 Ccf/month, current tier 2 for all additional above 3 Ccf

Table 2Proposed Wastewater Rates

	Current	Proposed			
	Rate	FY 2015	FY 2016	FY 2017	FY 2018
Single-Family Residential					
First 4 Ccf/Month	\$7.90 ¹	\$9.06	\$9.82	\$10.84	\$12.40 ³
All Additional	\$10.53 ¹	\$11.23	\$11.34	\$11.66	\$12.40 ³
Multiple-Family Residential					
First 3 Ccf/DU ² /Month	\$8.25	\$9.24	\$9.95	\$10.91	\$12.40 ³
All Additional	\$11.01	\$11.48	\$11.51	\$11.75	\$12.40 ³
Non-Residential					
Volume per CCF	\$6.62	\$6.15	\$6.45	\$6.90	\$7.66
COD per lb.	\$0.22	\$0.44	\$0.46	\$0.49	\$0.55
SS per lb.	\$0.89	\$0.83	\$0.87	\$0.93	\$1.03
O/G per lb.	\$1.11	\$0.87	\$0.91	\$0.97	\$1.08

¹Current Tier 1 for first 3 Ccf/month, current Tier 2 for all additional above 3 Ccf

Table 3Proposed Fire Service Rates

	Current	Proposed			
	Rate	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Monthly Service Charge:					
1 in	\$1.90	\$7.77	\$8.71	\$9.59	\$10.36
1-1/2 in	\$2.40	\$11.30	\$12.66	\$13.93	\$15.05
2 in	\$5.00	\$15.54	\$17.41	\$19.16	\$20.70
3 in	\$13.80	\$25.44	\$28.50	\$31.35	\$33.86
4 in	\$29.50	\$39.57	\$44.32	\$48.76	\$52.67
6 in	\$85.40	\$74.90	\$83.89	\$92.28	\$99.67
8 in	\$182.00	\$117.30	\$131.38	\$144.52	\$156.09
10 in	\$327.50	\$166.76	\$186.78	\$205.46	\$221.90
12 in	\$528.80	\$308.09	\$345.07	\$379.58	\$409.95

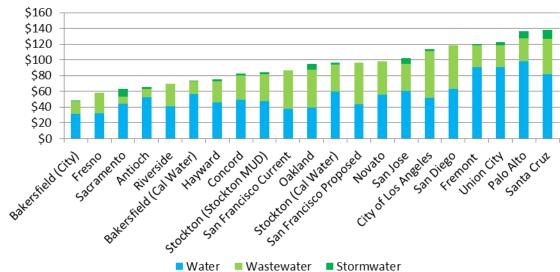
²DU = Dwelling Unit

³Docks & Shipping service charges will be per occurrence based on meter size

²DU = Dwelling Unit

³In FY 2018, Tier 1 and Tier 2 will be a uniform rate for all wastewater discharge units





Introduction

This report presents an analysis of revenues, expenditures, revenue requirements, and rates and charges for water and wastewater services. The revenue requirements for FYE 2015 are based on the FYE 2015 budgets adopted by the San Francisco Public Utilities Commission in February 2014. The revenue requirements include operation and maintenance expenses, principal and interest payments on debt incurred to finance capital projects, revenue funded capital projects, and reserves.

Background

The Water Enterprise is responsible for the storage, treatment, and distribution of water supplied from the Hetch Hetchy Reservoir and other reservoirs in the San Francisco Bay Area. The Water Enterprise operates and maintains 21 reservoirs, 11 water tanks, two treatment plants, 21 pump stations, 60 miles of tunnels, 233 miles of transmission pipelines, and 1,250 miles of distribution mains.

The Water Enterprise serves approximately 2.6 million people in the San Francisco Bay Area including retail customers in the City and wholesale customers located in San Mateo, Santa Clara, and Alameda Counties. The Water Enterprise sold approximately 215 million gallons of water per day in the year ended June 30, 2013. Approximately two-thirds of the water delivered by the Water Enterprise is to wholesale customers. Retail customers are primarily San Francisco consumers and include residential, commercial, industrial, and municipal users.

The Wastewater Enterprise is responsible for protecting the public health and the surrounding bay and ocean receiving waters by collecting, transmitting, treating, and discharging storm and sanitary flows generated in the service area. The Wastewater Enterprise operates and maintains three treatment plants and approximately 1,000 miles of combined storm and sanitary collection system pipes, sewer mains, tunnels and transport/storage boxes. In addition to parts of old-town Sacramento, San Francisco is the only city in California with a comprehensive combined sewer system. The combined system collects both waste water and storm water in the same network of pipes and provides treatment to remove harmful pollutants before discharging into the San Francisco Bay and Pacific Ocean.

The Wastewater Enterprise also serves, on a contractual basis, certain municipal customers located outside of the City limits, including the North San Mateo County Sanitation District No. 3, the Bayshore Sanitary District, and the City of Brisbane. The Wastewater Enterprise recovers costs of service through user fees based on the volume and strength of sanitary flow.

SFPUC Rates Policy

In February 2012, the San Francisco Public Utilities Commission approved the SFPUC Rates Policy which states that rates are set by the Commission pursuant to the authority and provisions set forth by the San Francisco Charter (Section 8B.125). All budgets, rates, fees, and charges presented by SFPUC staff to the Commission must conform to the SFPUC Rates Policy, the four key principles of which are:

- **1. Affordability** In order to keep rates affordable to the SFPUC's retail and wholesale customers:
- Rates will be set such that retail and wholesale customers pay for benefits and services that they receive;
- Budgets will provide for fund balance reserves to mitigate cost and revenue uncertainties and stabilize rates to minimize large rate changes;
- Rate setting will include comparative information of neighboring and other California utilities;
- Capital and program decision making will be based on both annual and total life-cycle costs;
- Rate setting will include consideration of affordability for low-income customers.
- **2. Compliance** Rate-funded budgets will comply with:
- All applicable State and Federal laws;
- San Francisco Charter, ordinances, resolutions and other policy directives:
- Regulations and permits;
- Contract commitments:
- Bond covenants; and
- Other laws as well as Commission policies and objectives including, but not limited to:
 - Budget Law and Policies
 - Debt Law and Policies
 - Ratepayer Accountability
 - Community Benefits Policy
 - Environmental Justice Policy
 - Sustainability and Resource Conservation
 - Land Use Policy
 - Local Hire Ordinance
 - Electric Resource Plan
 - Technology Adoption & Implementation Best Practices
 - Asset Management Best Practices

- **3. Sufficiency** Rates will be sufficient to recover the full cost of providing the SFPUC's essential utility services and mission, including:
- Adopted levels of service for Water, Power and Sewer;
- Adopted and best practice levels of service for asset Repair and Replacement to ensure the maintenance of assets in a state of good repair;
- All anticipated operating and capital costs, including personnel costs changes and other operating cost inflation; and
- Funding to carry out adopted Commission policies, including prudent reserves sufficient to mitigate unplanned rate changes, revenue uncertainty and operating contingencies for the duration of the rate adoption period.
- **4. Transparency** Rate making will be transparent and include:
- Open and timely public meetings and review of rate setting alternatives and timing;
- Public information designed to provide clear explanation of rate changes and trends, including average bill impact illustrations;
- A description of both operating and capital costs to ensure that ratepayers know the component costs of their utility service and related programs;
- Rate-setting Oversight, including communications with the: Customers, Retail and Wholesale.
 - Citizens' Advisory Committee,
 - Rate Fairness Board.
 - Revenue Bond Oversight Committee,
 - San Francisco Public Utilities Commission,
 - Board of Supervisors,
 - Mayor's Office.

SFPUC Ratepayer Assurance Policy

In October 2012, the San Francisco Public Utilities Commission approved the SFPUC Ratepayer Assurance Policy. This policy is intended to provide ratepayers with the assurance that Commission decisions are made in the ratepayers' best interest. This policy promotes accountability and transparency by requiring a biannual, independently developed report card through which ratepayers and the Commission can see verifiable results that the ratepayer safeguards and policies are being implemented and yielding successful outcomes. The Ratepayer Assurance Scorecard, a copy of which can be found in the appendix of this report, addresses the following areas:

- Mission Management
- Personnel Management
- Asset Management
- Sustainability
- Operating Cost Containment

Financial Policies

The levels and structures of rates and charges to be established and collected are, in part, intended to comply with the terms of bond indentures and the Commission's financial policies.

The bond indentures contain certain covenants that the Commission must meet so long as any revenue bonds issued under the indentures are outstanding. Failure to comply with these covenants could result in default under the indenture and ultimately the loss of access to the public markets for capital financing. Key covenants include:

- The operating covenants require that each enterprise be run and maintained as a separate revenue producing entity. The Commission covenants to:
 - Maintain each system in good repair and working order and to pay operation and maintenance expenses when due;
 - Charge and collect fees for services provided;
 - Keep system facilities and revenues free of liens (other than as contemplated for security for financings);
 - Maintain adequate insurance on facilities;
 - Not sell or otherwise dispose of any essential part of the system;
 - Apply eminent domain or insurance proceeds to either acquire or build replacement facilities or repay debt;
 - Comply with contracts and governmental regulations; and
 - Adopt budgets, maintain adequate accounting records and cause annual audits to be performed.
- The rate covenant requires the Commission to establish and collect rates and other charges sufficient to satisfy operational needs and debt service obligations. Specifically, the Commission covenants to collect rates sufficient to generate net revenues (gross revenues less operation and maintenance expense) plus available fund balances that are no less than 1.25 times annual debt service.
- An additional debt covenant requires certain conditions be met prior to the issuance of additional debt, including an independent prospective determination that the rate covenant will be met upon the increase in annual debt service.

The SFPUC follows financial practices for the Water and Wastewater Enterprises that are consistent with the policies adopted by the Commission. Those practices include:

 Debt Service Coverage – rates should be established to achieve coverage on a current revenue basis that equal or exceed 1.25 times annual debt service (excluding State loan repayment obligations);

- Operating Fund Balance Reserves budgets and rates will be projected and proposed for adoption such that Operating Fund Balance Reserves, by the end of the 10-Year Financial Plan, meet one or more of the following;
 - Total at least 15% annual revenues
 - Total at least 15% of annual expenditures
 - Result in Debt Service Coverage, on an Indenture Basis including fund balance reserves to pay debt service of at least 1.25 times
- Repair and Replacement Funding rates should be established to include funding for repair and replacement of existing plant and equipment on a payas-you-go basis; and
- Rate Increases regular and calibrated rate increases based on cost of service should be implemented to ensure customer understanding and acceptance.

Rate History

From 1978 until 2007, the Water Enterprise used a residential rate structure that consisted of a monthly service charge based on meter size plus a uniform volume charge for retail water sales in San Francisco. In 2007, the Commission replaced the uniform residential volumetric rate with a two block rate structure.

From 1978 until 2005, the Wastewater Enterprise used a 2-tier, inclining block residential rate structure. In 2007 this structure was modified to add a third tier but, in 2009, the structure was again revised to include only 2 tiers.

In 1998, San Francisco voters approved Proposition H, which froze retail water and wastewater rates from January 1, 1998 through July 1, 2006. Proposition H allowed two exceptions to the rate freeze: Rates could be raised to pay the debt service on voter-approved revenue bonds and to pay the cost of emergencies declared by the Mayor. Retail water rates were increased in 2001 and 2002 to pay the debt service on bonds authorized by the voters prior to the passage of Proposition H. Retail water rates were also raised in 2005 and 2006 in anticipation of the sale of bonds authorized by the voters in 2002.

In 2002, San Francisco voters approved Propositions A and E, which rescinded the rate freeze. Proposition A also authorized the SFPUC to issue roughly \$1.6 billion in revenue bonds for water system capital improvements. The Controller's statement for this measure stated that passage of the measure would result in the tripling of the water bill for an average single family residential customer. Proposition E gave the SFPUC additional authority to issue revenue bonds with a two-thirds vote of the Board of Supervisors. Proposition E also established the requirement for an independent review of water and wastewater rates every 5 years. Finally, Proposition E established the Rate Fairness Board and charged the body with holding public hearings on rate recommendations prior to rate approval by the San Francisco Public Utilities Commission.

In 2013, the SFPUC installed advanced meter infrastructure which allowed for automated meter readings. The SFPUC was able to increase billing frequency from bi-monthly to monthly which aligned SFPUC billing with standard billing practices and allowed for easier monitoring of water-use by SFPUC customers.

The following table shows water and wastewater rates since FYE 1979.

 Table 4

 SFPUC Historical Single-Family Residential Water & Wastewater Rates

	WATER				WASTE			
		Volume	Volume		Volume	Volume		
	Fixed	Charge	Charge	Nominal	Charge	Charge		Nominal
	Charge	\$ Per Ccf	\$ Per Ccf	Rate	\$ Per Ccf	\$ Per Ccf		Rate
Year	(\$)	(0-3 Ccf)	(>3 Ccf)	Increase	(0-3 Ccf)	(>3 Ccf)		Increase
1978-79	1.05	0.37	0.37		0.6327	1.1267		
1979-80	1.20	0.41	0.41	0.0%	0.6327	1.1267		0.0%
1980-81	1.20	0.41	0.41	0.0%	0.6640	1.3560		14.0%
1981-82	1.20	0.41	0.41	0.0%	0.6640	1.3560		0.0%
1982-83	1.20	0.41	0.41	0.0%	0.6640	1.3560		0.0%
1983-84	1.50	0.46	0.46	12.0%	0.6640	1.3560		0.0%
1984-85	1.50	0.51	0.51	10.0%	0.7646	1.2406		0.0%
1985-86	1.50	0.51	0.51	0.0%	0.6489	1.4901		5.0%
1986-87	1.50	0.51	0.51	0.0%	0.8425	1.6637		18.0%
1987-88	1.50	0.51	0.51	0.0%	0.8425	1.6637		0.0%
1988-89	1.70	0.59	0.59	15.0%	0.9176	1.8368		10.0%
1989-90	1.70	0.59	0.59	0.0%	0.9665	2.0713		10.0%
1990-91	1.90	0.67	0.67	14.0%	1.1238	2.5033		20.0%
1991-92	2.10	0.94	0.94	14.0%	1.3089	3.1334		20.0%
1992-93	2.40	0.90	0.90	18.0%	1.4969	3.8448		20.0%
1993-94	2.80	1.02	1.02	13.7%	1.5967	3.9335		4.0%
1994-95	3.20	1.17	1.17	14.0%	1.6763	4.2197		7.0%
1995-96	3.20	1.17	1.17	0.0%	1.7656	4.5809		7.0%
1996-97	3.40	1.26	1.26	7.6%	1.8623	4.8334		6.0%
1997-98	3.40	1.26	1.26	0.0%	1.8623	4.8334		0.0%
1998-99	3.40	1.26	1.26	0.0%	1.8623	4.8334		0.0%
1999-00	3.40	1.26	1.26	0.0%	1.8623	4.8334		0.0%
2000-01	3.40	1.26	1.26	0.0%	1.8623	4.8334		0.0%
2001-02	3.70	1.37	1.37	8.7%	1.8623	4.8334		0.0%
2002-03	4.00	1.49	1.49	8.6%	1.8623	4.8334		0.0%
2003-04	4.00	1.49	1.49	0.0%	1.8623	4.8334		0.0%
2004-05	4.00	1.49	1.49	0.0%	2.15	5.37		11.0%
					0-3 Ccf	4-5 Ccf	>5 Ccf	
2005-06	4.60	1.71	1.71	15.0%	2.54	6.36	7.27	13.0%
2006-07	5.30	1.97	1.97	15.0%	2.88	7.19	8.22	13.0%
	Fixed							
2007-08	4.60	2.08	2.50	15.0%	3.14	7.84	8.96	8.0%
2008-09	4.70	2.28	2.89	15.0%	3.42	8.55	9.77	9.0%
					0-3 Ccf	>3 Ccf		
2009-10	5.40	2.61	3.48	15.0%	6.05	8.35		7.0%
2010-11	6.20	3.09	4.12	15.0%	6.91	9.21		7.0%
2011-12	7.00	3.50	4.60	12.5%	7.16	9.55		5.0%
2012-13	7.90	3.90	5.20	12.5%	7.52	10.03		5.0%
2013-14	8.40	4.20	5.50	6.5%	7.90	10.53		5.0%

WATER ENTERPRISE

Customers and Usage

Customer Classes

The Water Enterprise provides water to approximately 2.6 million people in San Francisco, Santa Clara, Alameda and San Mateo counties. Water Enterprise customers are grouped into retail and wholesale service categories. The retail customer category is further divided into in-city and outside-city customers. Customers within each sub-category are then grouped into revenue classes based on their service characteristics. The wholesale customer category consists of only one revenue class – suburban resale with long-term contract. The customer classes (and their subgroups) are described briefly below.

Retail Customers (In-City) - In FYE 2013, the Water Enterprise provided retail water service in San Francisco to 173,362 accounts representing a service population of over 825,000 people. The customer classes served include single-family and multiple-family residential, commercial, industrial, municipal, docks and shipping, and builders and contractors. All accounts are metered.

Suburban Retail Customers (Outside-City) - The Water Enterprise provides retail water service outside San Francisco to a small number of customers in the Town of Sunol and other customers served directly from the Water Enterprise's transmission pipelines. Municipal accounts outside San Francisco include San Francisco International Airport, Sharp Park and the San Francisco's county jail in San Bruno.

Wholesale Customers - The Water Enterprise provides wholesale water service to 27 suburban wholesale

Table 5Number of Active Accounts, as of June 30, 2013

Customer Class	Number
City Retail	
Single Family	110,062
Multiple-Family	41,121
Commercial	20,054
Industrial	83
Municipal	1,826
Builders & Contractors	215
Docks & Shipping	1
Subtotal City Retail	173,362
Suburban Retail	301
Retail subtotal	173,663
Suburban Wholesale	<u>81</u>
Total	<u>173,774</u>

customers. They, in turn, provide retail water service to approximately 1.8 million people in Alameda, Santa Clara and San Mateo counties. Wholesale water service is provided under the terms of the 2009 Water Supply Agreement (WSA) which expires on June 30, 2034, and is not the subject of this report.

Water Sales

San Francisco retail water sales have varied over the years with changes in number of customers served, economic activity, plumbing codes and climatic conditions. Although San Francisco was impacted by the Great Recession that began in 2008, the City population continued to grow. However, from a watersales perspective, population growth was offset by the downturn in economic activity. Water sales were also impacted by the ongoing implementation of San Francisco's conservation ordinances which mandate more efficient plumbing fixtures. Annual rainfall in San Francisco from FYE 2009 to FYE 2011 equaled or exceeded normal precipitation. However, from FYE 2012 onward, San Francisco has experienced drier than normal years. Water sales decreased sharply, approximately 7.5%, in FYE 2009 and FYE 2010, and have generally remained at FYE 2010 levels since. In response to a third year of below-normal precipitation through January 2014, the SFPUC asked all customers to voluntarily curtail water consumption by 10 percent. The following table shows total water sales for the most recent five-year period.

Table 6
Historical Water Sales
Fiscal Years Ended June 30
(Thousand Ccf)

	`	,			
Customer Class	FYE2009	FYE2010	FYE2011	FYE2012	FYE2013
City Retail					
Single-Family	8,535	8,023	7,849	7,854	7,848
Multiple-Family	12,456	12,204	12,261	12,140	11,858
Subtotal Residential	20,991	20,227	20,110	19,994	19,706
Commercial	10,128	9,490	9,400	9,369	9,355
Industrial	100	83	87	90	92
Municipal	2,093	1,971	1,760	1,585	1,764
Docks & Shipping	32	16	18	11	15
Subtotal San Francisco	33,344	31,787	31,375	31,049	30,932
Suburban Retail	2,071	1,692	1,739	1,773	1,817
Total Retail	35,415	33,479	33,114	32,822	32,749
Wholesale	80,037	73,830	71,168	70,633	72,193
Grand Total	115,452	107,309	104,282	103,455	104,942

Source: SFPUC Comprehensive Annual Financial Report FY 2012-13

In FYE 2008, an average single-family residential (SFR) account used 6.4 Ccf, or 4,800 gallons, per month; in FYE 2013 the average SFR account used 5.9 Ccf, or 4425 gallons, per month. The average San Francisco single-family

household uses 148 gallons of water per day, less than half California single-family household average of 360 gallons per day.¹

In FYE 2009, San Francisco's 39,664 multiple-family residential accounts representing 231,726 dwelling units used an average of 4.5 Ccf or 3,375 gallons per month per dwelling unit. In FYE 2013, the average for 245,823 was 4.0 Ccf or 3,000 gallons per month per dwelling unit. The average San Francisco multifamily household uses 100 gallons of water per day.

The non-residential class shows a wide range of usage patterns. However, similar to overall consumption patterns in San Francisco, Water sales decreased sharply, approximately 8.4%, in FYE 2009 and FYE 2010, and have generally remained at FYE 2010 levels since.

The number of SFPUC customer accounts is projected to increase at an annualized rate of 0.5%, based on population growth estimates. However, ongoing conservation and per-capita water-demand reductions are expected to offset the impact of population growth. As a result, the SFPUC projects that the annualized, aggregate water demand will remain flat for the forecast period. Likewise, Wholesale water sales are projected to remain flat consistent with ongoing, state-wide conservation.

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¹ California Single-Family Water Use Efficiency Study, William DeOreo, 2011, California Department of Water Resources

Revenues

The Water Enterprise's principal source of revenue is the sale of water to its Retail Customers and Wholesale Customers, as projected below for FYE 2014.

TABLE 7FYE 2014 Water Enterprise Revenues (\$000)

Retail water sales	\$188.4	47.7%
Wholesale water sale	183.2	46.4
Other Revenue	23.4	5.9
Total	\$395.0	100.0%

Non-operating other revenue shown above includes rental income, interest earnings, capacity fees, and other revenues.

The Water Enterprise's current schedule of retail rates was adopted by the Commission on June 5, 2009 and became effective with water meter readings made beginning July 1, 2009. The current rate applicable to Wholesale customers was effective with meter readings beginning July 1, 2013. Water sales revenues are the primary source of funds used to meet the annual revenue requirement. Each source of revenue is discussed in greater detail below.

Retail Water Sales

There are eight rate schedules applicable to retail water sales in San Francisco and three rate schedules applicable to retail water sales outside of San Francisco. In FYE 2014, retail water sales are projected to account for \$188.4 million in revenue. Retail Customers pay a flat monthly service charge based on the size of the meter plus a volumetric charge for all water delivered based on one-month meter readings. Volumetric charges for single- and multi-family residential customers are based on a two-tiered rate structure, where the first tier is applicable to the first 3 CCF of use per month and the second tier is applicable to all additional use. Volumetric charges for non-residential customers are based on a uniform rate. The table below details retail water rates for FYE 2013.

TABLE 8 FYE 2014 Commodity Rates

	Single-Family Residential (per CcF)	Multi-Family Residential (per CcF)	Non-Residential (per CcF)
Uniform	- (por our)	(por cor)	\$5.40
Tier 1 (0-3 CCF)	\$4.20	\$4.50	-
Tier 2 (3+ CCF)	\$5.40	\$5.90	-

The SFPUC's retail rates and charges for delivered water are set to equal the cost of operation, maintenance, replacement, debt service and other costs incurred in gathering, treating and delivering water for consumptive and other uses in the City and other areas receiving retail service from the Water Enterprise. The following table lists retail water rate adjustments since rates were last approved by the Commission in FYE 2009.

TABLE 92009 Commission Approved Rate Adjustments

	• •
Date	Retail Rate Adjustment
July 2009	15.0%
July 2010	15.0%
July 2011	12.5%
July 2012	12.5%
July 2013	6.5%

Wholesale Water Sales

The Water Enterprise provides wholesale water service to 27 Wholesale Customers, which consist of 25 public agencies, one private utility and one private non-profit university. All of the Wholesale Customers are located within the County of Alameda, the County of Santa Clara and the County of San Mateo.

Wholesale Customer rates are determined based upon the Wholesale Customers' collective share of the Water Enterprise's total revenue requirements, known as the "Wholesale Revenue Requirement" in the WSA. Under the WSA, the cost of service for suburban resale is calculated on the same "cash basis" as retail rates. Using the cash basis, the cost of service for Wholesale Customers will include a pro-rata share of operation and maintenance expense plus a prorata share of debt service and appropriations for revenue-funded capital improvements of the Regional Water System. Under the WSA, adjustments to the Wholesale Customers' rate schedules, other than emergency rate adjustments and drought pricing, are coordinated with the budget development process.

Interest Income

The Water Enterprise earns interest income from the investment of funds on deposit with the City Treasurer. This interest income is an additional source of revenue for the Enterprise. Interest income earned from the investment of moneys in restricted funds such as bond reserves may only be used for the purpose of that fund and are not available to meet day-to-day operating expenses. In FYE 2014, investment income earned by unrestricted funds is projected to be \$1.6 million.

Rental Income and Miscellaneous Revenues

The Water Enterprise derives additional income from rents and permit fees for secondary uses of its watershed lands and pipeline rights-of-way. The Water Enterprise has entered into long-term leases that allow portions of its Alameda and Peninsula watersheds to be used for golf courses and for land adjacent to its Sunol Headquarters to be mined for gravel. Typical uses of pipeline rights-of-way are parking and landscaping for adjoining properties. In FYE 2014, rental income is projected to be \$10.6 million.

The Water Enterprise receives other income from custom work, reimbursements, miscellaneous service charges and other fees. Miscellaneous revenue from all sources in FYE 2014 is projected to be \$23.4 million.

Total Revenues

The following table presents projected revenues for the Water Enterprise. These projections assume no change in the current FYE 2014 retail rate.

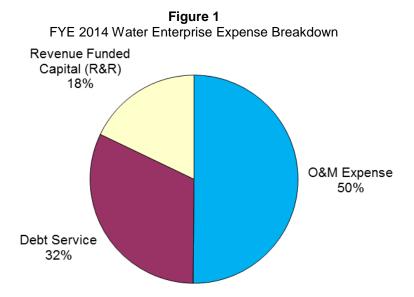
Table 10
Water Enterprise Revenues
(\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
Water Service Charges Retail	188,444	188,444	188,444	188,444	188,444
Retail Rate Increase Wholesale	- 183,210	- 211,674	- 248,197	- 249,245	- 263,119
Total Water Service Charges	371,654	400,118	436,641	437,689	451,563
Interest Income	1,620	1,384	1,537	1,689	1,427
Rents and Other Misc. Revenues	21,800	22,454	23,128	23,521	24,227
Total Revenue	395,074	423,956	461,306	462,899	477,217

The projected revenues are based on projected water sales and the schedules of rates in effect in each year. Revenues from sales of water to the Wholesale Customers are calculated in accordance with the WSA. Water volume sales to the Wholesale Customers and Retail Customers are projected to remain flat over the projection period. Interest earnings assume increasing annual yields, from 0.75% in FYE 2014 to 2.0% in FYE 2018. Other income, including rental income, is assumed to increase at a 3% inflation rate over the projection period.

Expenses

The Water Enterprise's annual operating budget includes operation and maintenance costs, repair and replacement costs funded from current revenues and, increasingly, debt service on revenue bonds used to finance capital improvements including the \$4.7 billion WSIP. Each expense component is discussed in greater detail below. As illustrated in the following figure, operations and maintenance costs will be replaced by debt service as the largest component of the Water Enterprise's expenses.



The following table summarizes the Enterprises' major expense components for the five most recent fiscal years.

Table 11
Water Enterprise Historical Expenses
Fiscal Years Ended June 30
(\$000)

FYE2009	FYE2010	FYEZU11	FYEZU1Z	FYE2013
166,005	180,583	178,827	188,839	202,872
69,303	70,201	101,211	129,402	129,183
39,602	44,771	48,119	47,957	72,386
274,910	295,555	328,157	366,198	404,441
	166,005 69,303 39,602	166,005 180,583 69,303 70,201 39,602 44,771	166,005 180,583 178,827 69,303 70,201 101,211 39,602 44,771 48,119	69,303 70,201 101,211 129,402 39,602 44,771 48,119 47,957

Operation and maintenance expense includes salaries and fringe benefits, material and supplies, power and energy, and services of the other City departments including SFPUC support bureaus. The cost of operating the water system in FYE 2014 is projected to be \$454.2 million. Labor-related expenses are the largest component of Operating and Maintenance Expenses and are projected to grow 3% annually. All other components of Operating and Maintenance Expenses are projected to grow at 3% per year during the forecast period, in accordance with the Ratepayer Assurance Policy.

Debt Service

The SFPUC finances major capital improvements, in part, by issuing debt for two primary reasons. First, given the size of the capital program, the SFPUC does not have the available financial reserves that would otherwise be required to fund the capital improvement program, nor would it be reasonable to increase the water rates and charges in order to cash fund these improvements. Second, spreading the debt service costs for long-lasting projects over the repayment period provides intergenerational equity by effectively spreading the financial burden between both existing and future users of the system.

The SFPUC has existing debt obligations from past capital projects that were debt financed. Annual payments for existing debt are calculated on a fiscal year basis. As noted above, a portion of the prepayment received from BAWSCA was used to reduce retail-customer debt obligations. In addition to annual payments for existing debt, the SFPUC anticipates issuing additional bonds to finance WSIP projects and a portion of R&R projects. Debt service payments are projected assuming a term of 30 years, annual interest rate of 5 percent and three years of capitalized interest. Because the SFPUC uses three years of capitalized interest, debt service payments begin three years following the date of issuance. This delays the impact to annual rate revenue requirements, which allows the SFPUC to increase rates over a multi-year period ahead of forecasted payments, instead of implementing increases in a single year. This use of longterm debt is a reasonable approach allowing the SFPUC to better match capital expenditures with the ratepayers benefitting from the projects by having both existing and future customers pay for these improvements. Table 12 summarizes the assumed total debt schedule of the utility including both existing and future debt.

Table 12Water Enterprise Projected Annual Debt Service (\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
Daht Carries	4.47.050	044470	040.040	054 077	000 004
Debt Service	147,352	214,172	240,046	251,377	283,061

Revenue Funded Capital

In addition to issuing debt, the SFPUC funds a portion of renewal and replacement (R&R) projects through current year revenues. The amount of capital projects funded using current year revenues in determined during the budget process and the revenues are delineated as either local or regional, depending on the associated projects. All local projects are funded solely through retail rates, while the regional projects are split between wholesale and retail revenues proportional to their total annual deliveries. These amounts are summarized in Table 13.

Table 13Water Enterprise Revenue-Funded Capital (\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
Regional Capital	24,345	22,746	29,276	21,666	19,602
Local Capital	57,162	88,806	28,049	22,488	19,017
Total Revenue-Funded Capital	81,507	111,552	57,325	44,154	38,619

Summary of Projected Expenses

The table below shows projected operating expenses based on the Commission-adopted budgets for FYE 2015 and FYE 2016. Operation and maintenance expense for FYE 2017 and subsequent years is projected to increase at an annual rate of 3%.

Table 14
Water Enterprise Expenses
(\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
O&M Expense	225,304	218,208	219,338	225,918	232,695
Debt Service	147,352	214,172	240,046	251,377	283,061
Revenue Funded Capital (R&R)	81,507	111,552	57,325	44,154	38,619
Total Expenditures	454,163	543,932	516,709	521,449	554,375

Revenue Requirement

The annual expenditures for operation and maintenance, debt service and revenue funded capital make up the Water Enterprise's revenue requirement. However, to determine the revenue requirement for rate purposes, the income derived from interest, rents and other miscellaneous sources are deducted from the total revenue requirement. Also, operating surpluses from prior years can be included in the calculation of net revenue requirement as a one-time source. The net revenue requirement represents the amount to be recovered through water sales revenues.

The revenue and revenue requirement forecasts for the four-year period from FYE 2015 to FYE 2018 are shown in the table below. The projected revenues and projected expenses are taken from Table 10 and Table 14, respectively.

Table 15
Water Enterprise Projected Revenues and Expenses under Current Rates (\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
Beginning Balance	279,550	220,461	100,484	45,081	(13,469)
Water Service Charges					
Retail	188,444	188,444	188,444	188,444	188,444
Retail Rate Increase	-	-	-	-	-
Wholesale	183,210	211,674	248,197	249,245	263,119
Total Water Service Charges	371,654	400,118	436,641	437,689	451,563
Interest Income	1,620	1,384	1,537	1,689	1,427
Rents and Other Misc. Revenues	21,800	22,454	23,128	23,521	24,227
Total Revenue	395,074	423,956	461,306	462,899	477,217
Expenditures					
O&M Expense	225,304	218,208	219,338	225,918	232,695
Debt Service	147,352	214,172	240,046	251,377	283,061
Revenue Funded Capital (R&R)	81,507	111,553	57,325	44,154	38,619
Total Expenditures	454,163	543,933	516,709	521,449	554,375
Net Revenues	(59,089)	(119,977)	(55,403)	(58,550)	(77,158)
Ending Balance	220,461	100,484	45,081	(13,469)	(90,627)

As shown above, revenues based on the Water Enterprise's current rates will be insufficient to meet the annual revenue requirement for all years in the forecast period. The cumulative revenue deficiency over the forecast period based on revenues under existing rates, and not including the \$59 projected deficiency for the current year, is projected to be \$311 million.²

Retail Revenue Requirement

To develop the projected retail cost responsibility, the projected Wholesale revenue requirement and other operating and non-operating revenues are deducted from total expenditures. Finally, the accumulation of available fund balance, if any, is deducted from the retail revenue requirement. The fund balance, if adequate, can be used to offset any deficit assigned to retail customers in lieu of raising rates.

The following table shows the development of the retail cost responsibility for the forecast period.

² The projected revenue requirement for the Water Enterprise, over the forecasted period, is identical to the methodology outlined in the independent consultant cost of service study, as discussed in Chapter 3 of Appendix B. Modifications to the revenues and expenses are due to updated figures as presented in the Commission-adopted 10-Yr Financial Plan.

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Table 16
Water Enterprise Projected Shortfall under Current Rates (\$000)

	FYE2014	FYE2015	FYE2016	FYE2017	FYE2018
Beginning Balance	279,550	220,461	100,484	45,081	(13,469)
Water Service Charges Retail Retail Rate Increase	188,444	188,444	188,444	188,444	188,444
Wholesale	183,210 371,654	<u>211,674</u> 400,118	<u>248,197</u> 436,641	<u>249,245</u> 437,689	<u>263,119</u> 451,563
Total Water Service Charges Interest Income	1,620	1,384	1,537	1,689	1,427
Rents and Other Misc. Revenues	21,800	22,454	23,128	23,521	24,227
Total Revenue	395,074	423,956	461,306	462,899	477,217
Expenditures O&M Expense Debt Service Revenue Funded Capital (R&R) Total Expenditures	225,304 147,352 81,507 454,163	218,208 214,172 111,553 543,933	219,338 240,046 57,325 516,709	225,918 251,377 44,154 521,449	232,695 283,061 38,619 554,375
Net Revenues Ending Balance	(59,089) 220,461	(119,977) 100,484	(55,403) 45,081	(58,550) (13,469)	(77,158) (90,627)
Retail Cost Responsibility Total Expenditures Less:		543,933	516,709	521,449	554,375
Wholesale Revenue Requirement		211,674	248,197	249,245	263,119
Other Revenues		23,838	24,665	25,210	25,654
Net Retail Responsibility Current Retail Revenues		308,421	243,847	246,994	265,602
Surplus or (Deficit)		<u>188,444</u> (119,977)	188,444 (55,403)	188,444 (58,550)	<u>188,444</u> (77,158)

In the above table, the deficit reflects the additional revenue required to meet projected costs. The last line of the table indicates current retail revenues are insufficient in each year to meet the projected retail cost responsibility. To meet the projected revenue deficiency, and to meet indenture-required, debt service coverage, an increase in rates is required. By indenture, the SFPUC is required to maintain at least 1.25 times coverage ratio of annual debt service inclusive of reserves. In addition, the SFPUC maintains at least 1.00 times coverage ratio excluding reserves.

At a minimum, in order to meet coverage requirements, rate must increase as shown in Table 17.

 Table 17

 Water Enterprise Minimum-Required Retail Rate Adjustments

	FYE2015	FYE2016	FYE2017	FYE2018
Annual Rate Adjustment	5.0%	0.0%	3.0%	35.0%
Cumulative Adjustment	5.0%	5.0%	8.2%	46.0%
Indenture Coverage	2.03	1.51	1.26	1.25
Current Coverage	1.00	1.05	1.00	1.18

Although the SFPUC has adequate reserves to support minimal rate increases in the first three years of the period, staff propose that rate increases be smoothed, in a way that reflects the completion of the WSIP, so that the final year does not have an abrupt rate increase. The rates proposed in Table 18 will result in sufficient funds to meet operational and capital expenditures and meet debt coverage reserve requirements.

 Table 18

 Water Enterprise Proposed Retail Rate Adjustments

	FYE2015	FYE2016	FYE2017	FYE2018
Annual Rate Adjustment	12.0%	12.0%	10.0%	7.0%
Cumulative Adjustment	12.0%	25.4%	38.0%	47.6%
Indenture Coverage	2.10	1.72	1.69	1.64
Current Coverage	1.07	1.21	1.23	1.18

In addition to avoiding abrupt rate increases, the proposed, smoothed, rate increases will support expenditure requirements beyond FYE 2018. Failure to meet this requirement could result in a credit rating downgrade, which could result in increased payments for any future debt.

Cost Allocation

Functional Cost Allocation

Functional cost allocation apportions the revenue requirement by major function. The water utility's primary functions are related to commodity components, both base and peak, which will be the basis of the water commodity rate, and customer-related costs, customer service, meter charges, and fire service, which will be the basis of the fixed water service and fire protection charges. These elements are referred to as functional cost categories.

- Base: Operating and capital costs incurred by the water system to provide a basic level of service to each customer.
- Peak: Costs incurred to meet peak demands for water in excess of base demand. This cost also includes capital costs related to oversizing the system to meet excess demand.
- Customer Service: Fixed expenditures, common to all customers, that relate
 to operational support activities including accounting, billing, customer service,
 and administrative and technical support.
- Meter Charges: Meter and capacity-related costs related to the meter's hydraulic capacity. As system facilities are designed to meet peaking requirements, a portion of the capacity-related costs, including debt service, are allocated to meter charges.
- *Fire Service:* Capacity-related costs related to the incremental, excess capacity designed into the system to provide private fire service.

The 2014 SFPUC Water and Wastewater Cost of Service Study allocated costs to the above functional cost categories by making functional cost allocations for existing assets, debt service, and operations and maintenance. Based on the analysis described within this report, the result of the functional allocation is presented in Figure 2.

The meter charges, customer service, and fire service components collectively represent 14 percent of cost, and are the foundation for the proposed monthly service charges. The remaining 86 percent of cost is allocated to the base and peak components, and is the basis for the proposed commodity rates. This split exceeds the target 70/30 split for variable and fixed revenues, set by the California Urban Water Conservation Council through their Best Management Practice 1.4.

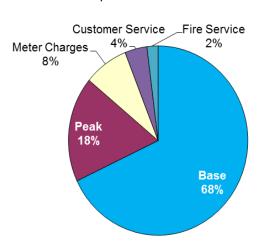


Figure 2
Water Enterprise Functional Cost Allocation

Unit Cost and Customer Allocation

The unit costs of service are developed by dividing the total annual costs allocated to each of the six functional cost components by the total annual service units of the respective component.

- Base: Base units of service are based on annual water consumption in Ccf.
- **Peak:** Peak units are based on the extra capacity needed to serve beyond base demand to meet maximum demand in Ccf.
- **Meter Charge:** Meter charge units are based on the total number of equivalent meters, which is a measure of maximum flow rate by meter size.
- **Customer Service:** Customer service units are based on the total annual number of accounts.
- Fire Service: Similar to meter charges, fire service units are derived based on meter equivalents. The total number of fire service equivalents is based on private fire protection meters.

For meter charges and fire service, equivalent meters are used to recognize the fact that larger meters have a higher water flow potential and utilize greater system capacity. ³ Meter equivalents are derived based on the hydraulic capacity of the meter. Meter equivalents are based on the hydraulic flow of a 5/8 inch meter.

³ This analysis and recommendation on fire service was conducted as a part of the independent cost of service study. See Appendix B.

Customer Class Allocation

The unit costs of each component are then applied to each customer classes' projected use, accounts, and meter equivalents to derive customer class allocations. Projections are based on current use and accounts and costs are allocated to each customer class based on their respective base and peak usage to reflect the use of the overall system.

Rate Design

As noted earlier in this report, in February 2012, the SFPUC approved the SFPUC Rates Policy which states that all "budgets, rates, fees, and charges" will conform to the four key policy principles:

- Conservation
- Simplicity
- Stability
- Fairness

Given these multiple and, at times, competing principles, selection of an appropriate rate structure is complex. There is no single structure that meets all objectives equally, nor are all objectives or principles valued the same across utilities or customers. Each criteria or principle has merit and plays an important role in the rates implementation and overall effectiveness. These principles were discussed at length throughout the development of the rates proposal.

The proposed monthly service charges, residential and non-residential commodity rates, and interruptible water rates, were analyzed and reviewed as a part of the 2014 SFPUC Water and Wastewater Cost of Service Study. The proposed rates reflect the independent consultant recommendation on rate design.

Monthly Service Charge

The SFPUC's current monthly service charge includes a customer service component and a fixed-capacity cost component based on meter size. The customer service component recovers expenses associated with meter reading, billing, collection, and customer service. This component is the same for all customers regardless of meter size. The meter capacity component captures maintenance costs related to meters and services, as well as a portion of the Water Enterprise's capital costs. This component varies based on meter size to reflect the difference in potential demand that can be placed on the system by different sized meters. As with the existing charge, the proposed monthly service charge is a combination of the customer service and meter charges functional components. To determine this charge, the meter charges unit cost is multiplied by the meter capacity ratios as illustrated in Table 19.

Table 19Proposed FYE 2015 Monthly Service Charges

	Motor Charges
Cost Allocation	Meter Charges \$16,595,210
Units of Service	302,679
Cost/Unit	\$4.57

			Fixed Meter Charge		
	Meter	Meter		Customer	
Meter Size	Equivalent	Cost/Unit	Meter Charge	Service	Total
	Α	В	C = A * B	D	E = C + D
5/8 in	1.0	\$4.57	\$4.57	\$4.23	\$8.81
3/4 in	1.5	\$4.57	\$6.85	\$4.23	\$11.08
1 in	2.5	\$4.57	\$11.42	\$4.23	\$15.65
1-1/2 in	5.0	\$4.57	\$22.85	\$4.23	\$27.07
2 in	8.0	\$4.57	\$36.55	\$4.23	\$40.79
3 in	15.0	\$4.57	\$68.54	\$4.23	\$72.77
4 in	25.0	\$4.57	\$114.23	\$4.23	\$118.46
6 in	50.0	\$4.57	\$228.45	\$4.23	\$232.69
8 in	80.0	\$4.57	\$365.52	\$4.23	\$369.76
10 in	115.0	\$4.57	\$525.44	\$4.23	\$529.66
12 in	215.0	\$4.57	\$982.34	\$4.23	\$986.57
16 in	375.0	\$4.57	\$1,713.38	\$4.23	\$1,717.61

Residential Commodity Rates

In developing a proposal for residential commodity rates, the SFPUC considered a number of different rate structures, including:

- Uniform structure. Under a uniform rate structure, the price per unit is the same for all units of water consumed. A uniform rate is easy to communicate and administer but provides a weak conservation price signal. Additionally, a uniform rate structure does not account for costs incurred to meet peak demands for water in excess of basic demand. These costs include capital costs related to oversizing the system to meet excess demand.
- Inclining block structure. An inclining block structure account for costs incurred to meet peak demands and also encourages conservation by charging a higher price per block as consumption increases. Depending on the number of blocks and the differential between blocks, an inclining block rate structure can provide a strong conservation price signal. Large users, especially those whose high usage is related to household occupancy, may consider this rate structure to be burdensome.
- Lifeline structure. A lifeline rate structure provides a lower price for essential
 water use and is intended to ensure low-income users are not unduly
 burdened by high prices. Utilities offering this type of rate typically limit its
 application to qualifying low-income customers. However, rate eligibility
 requirements based on income do not to comply with California law for

municipal water and wastewater utilities under Proposition 218 without an appropriate funding source.

• Tier Adjustment Based on Number of Occupants. The SFPUC's current inclining block rate structure does not account for household size and the potential for higher non-peak water demand, due to higher household occupancy, which would result in decreased costs. An extension of the first tier based on household size could account for lower peak demands, and the resulting reduced cost associated with these households. The SFPUC considered an extended tier 1 for large households; however, the SFPUC currently has neither sufficient data nor billing-system flexibility to offer a tier adjustment according to requirements of Proposition 218. While a voluntary grant program could be established to begin collecting data regarding household size, public support for such a program is uncertain.

After consideration to both SFPUC Rates Policy principles as well as features of alternative rate structures, the SFPUC proposes to retain the existing two-tier rate structure for residential customers. However, in order to better reflect current usage patterns for SFR customers, as shown in Chart 2, the SFPUC proposes that the tier break for SFR customers be changed from 3 Ccf to 4 Ccf.

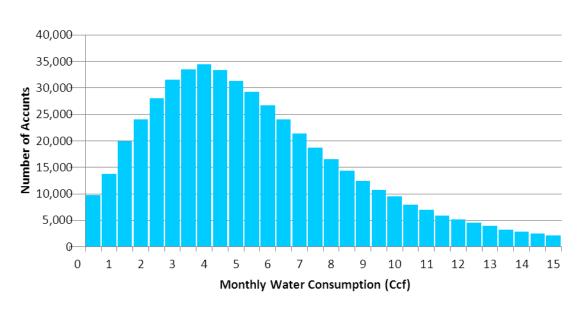


Chart 2
Single-Family Residential Monthly Water Consumption

No tier break change is proposed for MFR customers as the current 3 Ccf break aligns with current usage patterns as shown in Chart 3. As is the case with the current MFR rate structure, the commodity charge is per dwelling unit, rather than SFR's per account. For example, a MFR complex with 10 units would have

a 30 unit allotment for Tier 1. Based on the cost-of-service analysis and usage patterns, consumption that falls within Tier 1 is primarily non-peak water usage and is used consistently throughout the course of the year. Tier 2 accounts for the majority of costs associated with peaking. Tables 20 and 21 detail the method for determining rates for SFR and MFR users respectively.

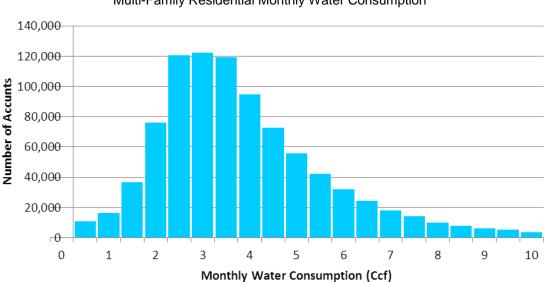


Chart 3
Multi-Family Residential Monthly Water Consumption

Table 20Proposed FYE 2015 SFR Water Rates

	Base Costs	Peak Costs	Total Cost	Usage (Ccf)	Unit Cost (\$/Ccf)
	Α	В	C = A + B	D	E = C/D
Tier 1	\$20,170,699	\$1,711,682	\$21,882,381	4,504,146	\$4.86
Tier 2	\$14,976,210	\$6,836,729	\$21,812,939	3,344,209	\$6.52
Total	\$35,146,909	\$8,548,411	\$43,695,320	7,848,355	

Table 21Proposed FYE 2015 MFR Water Rates

	Base Costs	Peak Costs	Total Cost	Usage (Ccf)	Unit Cost (\$/Ccf)
	Α	В	C = A + B	D	E = C/D
Tier 1	\$31,566,866	\$3,526,186	\$35,093,052	7,048,926	\$4.98
Tier 2	\$16,703,204	\$8,177,767	\$24,880,971	3,729,849	\$6.67
Total	\$48,270,069	\$11,753,953	\$59,974,023	10,778,776	

Non-Residential Commodity Rate

No change is being proposed in the rate structures applicable to non-residential customers. Currently, non-residential users pay a uniform commodity

rate water due to wide ranging usage characteristics among customers in this class. Unlike residential customers who are relatively homogeneous, non-residential users are diverse and vary significantly in size and usage, even between similar businesses. The proposed non-residential rate retains the existing uniform commodity rate structure. Table 22 details the method for determining the non-residential commodity rate.

Table 22Proposed FYE 2015 Non-Residential Water Rate

	Base Costs		Total Cost	Usage (Ccf)	Unit Cost (\$/Ccf)	
	Α	В	C = A + B	D	E = C/D	
All Usage	\$47,155,032	\$13,813,008	\$60,968,040	10,529,786	\$5.79	_

Interruptible Commodity Rate

Capacity has been built into the SFPUC water system to provide service for all customers at all times, including times of drought. During non-shortage periods, unused capacity can be utilized to serve interruptible users. The SFPUC implemented an interruptible water rate in 2007, which excluded all capital costs, for customers who may not be served during times of drought. The proposed interruptible service rate does not include capital-related costs associated with reserve capacity. The capital cost component to maintain this capacity will be borne by non-interruptible customers who use this capacity. Interruptible users would still be required to pay for capital costs associated with the treatment and delivery of water. Table 23 details the method for determining the interruptible rate. Usage projections were based on all irrigation customers using this rate. While this rate is currently available only to municipal customers, the SFPUC proposes making this rate available to all irrigation customers.

Table 23Proposed FYE 2015 Interuptible Water Rate

	Total Cost	Usage (Ccf)	Unit Cost (\$/Ccf)	
	C	D	E = C/D	
All Usage	\$5,991,105	1,142,108	\$5.25	

Other Commodity Rates

For Docks and Shipping as well as Builders and Contractors, the non-residential commodity rate is different from the general use unit rate. The main reason for the divergence is the difference in peaking factors which are based on a customer's peak day and peak hour consumption relative to their average base usage. The proposed non-residential commodity rates for Docks and Shipping and Builders and Contractors utilize SFPUC peaking factor assumptions specific to each customer class. Customer classes that peak on the system more often

are assessed a greater unit charge per Ccf to reflect the extra capacity that must be reserved for these customers' peak usage.

In addition to changes in the commodity rate, staff proposes that Docks & Shipping customers pay a one-time connection charge per occurrence and that water be billed on actual usage without the current minimum billing amount of 3,300 Ccf. In addition, staff proposes that Builders and Contractors customers pay a one-time connection charge and that the monthly service charge be based on the actual meter size instead of the current fixed amount.

Fire Service Charge

In addition to providing public fire protection through hydrants, the SFPUC provides water quantities and pressures necessary for private fire service throughout the distribution system. Although private fire protection connections do not use water except in case of fire, they do consume available capacity within the system. Proposed fire service charges are based on system capacity costs to store and deliver water for fire suppression to privately owned and operated fire sprinkler systems. In addition to funding fire system costs, the monthly fire protection rates include a customer service component, which is charged to each account regardless of service type. This component was included in the proposed rates to reflect the cost of billing, collection, and customer service. The addition of this cost component is the main driver for the increase in the monthly fire service charge associated with small meters. To determine the charge, the fire service unit cost is multiplied by the meter capacity ratios as illustrated in Table 24.

Table 24Proposed FYE 2015 Fire Service Charges

	Meter Charges
Cost Allocation	\$3,907,879
Units of Service	230,428
Cost/Unit	\$1.41

	Fixed Meter Charge			ge	
Marian Ciar	Meter	Meter	Marian Ohanna	Customer	T-1-1
Meter Size	Equivalent	Cost/Unit	Meter Charge	Service	Total
	Α	В	C = A * B	D	E = C + D
1 in	2.5	\$1.41	\$3.54	\$4.23	\$7.77
1-1/2 in	5.0	\$1.41	\$7.07	\$4.23	\$11.30
2 in	8.0	\$1.41	\$11.31	\$4.23	\$15.54
3 in	15.0	\$1.41	\$21.20	\$4.23	\$25.44
4 in	25.0	\$1.41	\$35.34	\$4.23	\$39.57
6 in	50.0	\$1.41	\$70.67	\$4.23	\$74.90
8 in	80.0	\$1.41	\$113.07	\$4.23	\$117.30
10 in	115.0	\$1.41	\$162.53	\$4.23	\$166.76
12 in	215.0	\$1.41	\$303.86	\$4.23	\$308.09

Proposed Retail Water Rates Schedule

The rates discussed above are summarized in Table 25, which provides the overall recommended rate schedule for FYE 2015. These rates for FYE 2015 are then escalated annually based on the revenue requirement findings proposed in Table 18. The resulting recommended rates for FYE 2015 through 2018 are summarized in Tables 26, 27, and 28.

The proposed rates result in a water bill for an average San Francisco single-family residential customer that remains competitive with that of peer agencies across the state, as shown in the Chart 4. Other agency data reflects current rates and does not include any planned or proposed rate increases for FYE 2015.

Table 25Proposed FYE 2015 Water Rates

Meter	Monthly Service	Monthly Fire		Tier Block	Rate
Size	Charge	Service Charge	Customer Class	(Ccf)	(\$/Ccf)
5/8 in	\$8.81	N/A	Resid	dential	
3/4 in	\$11.09	N/A	SFR	0-4	\$4.86
1 in	\$15.65	\$7.77		>4	\$6.52
1-1/2 in	\$27.08	\$11.30			
2 in	\$40.79	\$15.54	MFR	0-3	\$4.98
3 in	\$72.77	\$25.44		>3	\$6.67
4 in	\$118.46	\$39.57	Non-Re	sidential	
6 in	\$232.69	\$74.90	General Uses	All Usage	\$5.79
8 in	\$369.76	\$117.30	Interuptible	All Usage	\$5.25
10 in	\$529.67	\$166.76	Docks & Shipping	All Usage	\$5.79
12 in	\$986.57	\$308.09	Builders/Contractors	All Usage	\$6.95
16 in	\$1,717.61	N/A			

Table 26Proposed Monthly Service Charge

		•	•		
	Existing Rates		Propose	ed Rates	
Meter Size	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
5/8 in	\$8.40	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$10.30	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$13.50	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$21.80	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$32.20	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$55.80	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$89.50	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$173.80	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$275.60	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$393.70	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$731.70	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,272.70	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

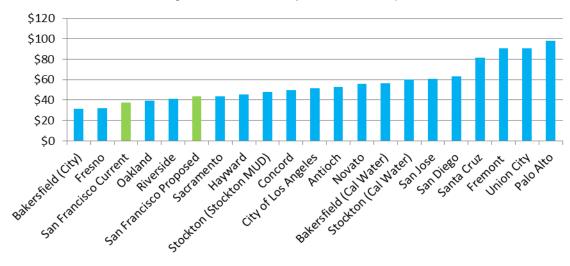
Table 27Proposed Monthly Fire Service Charge

	Existing Rates	Proposed Rates				
Meter Size	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	
1 in	\$1.90	\$7.77	\$8.71	\$9.59	\$10.36	
1-1/2 in	\$2.40	\$11.30	\$12.66	\$13.93	\$15.05	
2 in	\$5.00	\$15.54	\$17.41	\$19.16	\$20.70	
3 in	\$13.80	\$25.44	\$28.50	\$31.35	\$33.86	
4 in	\$29.50	\$39.57	\$44.32	\$48.76	\$52.67	
6 in	\$85.40	\$74.90	\$83.89	\$92.28	\$99.67	
8 in	\$182.00	\$117.30	\$131.38	\$144.52	\$156.09	
10 in	\$327.50	\$166.76	\$186.78	\$205.46	\$221.90	
12 in	\$528.80	\$308.09	\$345.07	\$379.58	\$409.95	

Table 28Proposed Water Rates

	Existing		Propose	ed Rates			
	Rates						
	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018		
Single Family Residential - Water per cubic foot (Ccf)							
First 4 Ccf / Month	\$4.20	\$4.86	\$5.45	\$6.00	\$6.42		
All Additional	\$5.50	\$6.52	\$7.31	\$8.05	\$8.62		
Multi-Family Residential - Water per cubic foot (Ccf)							
First 3 Ccf / Month	\$4.50	\$4.98	\$5.58	\$6.14	\$6.57		
All Additional	\$5.90	\$6.67	\$7.48	\$8.23	\$8.81		
Non-Residential - Water per	r cubic foot (C	cf)					
General Uses	\$5.40	\$5.79	\$6.49	\$7.14	\$7.64		
Interruptible	\$3.25	\$5.25	\$5.88	\$6.47	\$6.93		
Docks & Shipping	\$5.40	\$7.64	\$8.57	\$9.43	\$10.10		
Builder & Contractors	\$5.40	\$6.95	\$7.79	\$8.57	\$9.17		

Chart 4
Average FYE 2014 Monthly Water Bill Comparison



Price Elasticity of Demand for Water

On March 4, 2014, The Office of Economic Analysis, a department of the Controller's Office of the City and County of San Francisco, issued the report *Price Elasticity of Demand for Water: Estimates for San Francisco Retail Customers*. In this report, the City's Chief Economist looked at water consumption and rate data for SFR, MFR and Commercial customers from July 1992 to December 2013. This report found that "all else being equal, a rate increase will have negative effect on the water demand, and overall demand is inelastic: a 1% increase in rates will lead to a 0.3% decrease in consumption." The study also found that "commercial customers are relatively less price elastic" and that "multi-family customers are more price elastic."

These findings are generally in line with a similar 2009 study by The Office of Economic Analysis, *Estimating the Retail and Wholesale Price Elasticity of Demand for Water: Results for San Francisco and Suburban Customers.* The 2009 study found that a 1% increase in rates would result in a 0.24% decrease in residential customer consumption and a 0.29% decrease in commercial customer consumption.

In order to understand the impact of water savings resulting from plumbing codes and City conservation programs, the SFPUC commissioned a study by M.Cubed; SFPUC Passive and Active Conservation Savings: 1992-2012. This study found that water savings from plumbing codes and programs resulted in a 3.5 MGD reduction in consumption for SFR customers compared to an actual reduction over the period of 3.6 MGD. Similarly for MFR customers, water savings from plumbing codes and programs resulted in a 6.4 MGD reduction in consumption compared to an actual reduction over the period of 6.6 MGD. Finally, for non-residential customers, water savings from plumbing codes and programs resulted in a 1.3 MGD reduction in consumption compared to an actual reduction over the period of 4.5 MGD.

WASTEWATER ENTERPRISE

Customers and Usage

Customer Classes

The Wastewater Enterprise serves a population of approximately 840,000 within San Francisco and adjacent communities of Brisbane, Bayshore, and Daly City. Customers are grouped into two classes - residential and non-residential. Grouping customers with the same or similar wastewater characteristics into classes allows the Enterprise to allocate cost responsibility to each class based on their respective volumes and strengths (i.e. wastewater characteristics). Within each class, subgroups have been established to facilitate rate analysis and rate administration.

Residential

Residential sewage discharge results from human habitation of dwelling units. All residential sewage is assumed to have the same strength ("domestic strength") and is billed at the same rate.

In FYE 2013, the Wastewater Enterprise served 147,308 residential accounts representing approximately 359,000 dwelling units. According to Customer Care and Billing (CC&B) System monthly reports, residential customers discharged 19,609,603 Ccf of wastewater, for a monthly average of 4.5 Ccf per dwelling unit.

There are two categories of residential users – residents of single-family homes and residents of multi-family buildings.

 Single-Family Residential (SFR) customers live in dwelling units served by individual water meters. Each SFR customer account represents one dwelling unit. The customer of record, who may be the property owner or a tenant, is responsible for paying the monthly sewer bill.

In FYE 2013, the Wastewater Enterprise served 111,007 SFR accounts (68% of total accounts). These accounts discharged a total of 7,925,009 Ccf of wastewater (i.e. discharge units), an average of 6.0 Ccf per dwelling unit per month.

• Multi-Family Residential (MFR) customers live in buildings with multiple dwelling units served by a common water meter or bank of water meters. Typically, the occupants of these dwelling units are tenants. One MFR customer account can represent any number of dwelling units – from a two dwelling unit duplex to an apartment building with more than 100 dwelling units. The customer of record is usually the building owner or a property manager who is responsible for paying the monthly sewer bill. Most multifamily properties include the cost of sewer service in the rent, if allowable, or in homeowners' dues for condominium associations. Because individual tenants do not receive a bill, many MFR tenants may not be aware of the cost of sewer service. This payment arrangement makes it difficult to develop low-

income assistance or conservation programs for MFR residents.

In FYE 2013, the Wastewater Enterprise served 36,301 MFR accounts (22% of total accounts) representing about 248,044 dwelling units. MFR accounts discharged 11,684,594 Ccf of wastewater, an average of 4.0 discharge units per dwelling unit per month.

The average Single-Family and Multi-Family customer discharges about 50 gallons of wastewater per person per day,

Table 29
Number of Active Wastewater Accounts
(as of June 30, 2013)

Customer Class	Accounts
Single Family	111,007
Multiple-Family	36,301
Commercial	15,400
Municipal	729
Suburban	8
Total	163,445

which well under the EPA's estimated national standard of 70 gallons per person per day for indoor use. At nearly half of the national standard, San Francisco's volume of per capita discharge is illustrative of the city's conservation values and practices.⁴

Non-Residential

Non-residential wastewater discharges result from commercial, industrial, municipal, and other business activities. Non-residential customers include office buildings, hotels, restaurants, laundries, wholesale and retail stores, consumer services, manufacturing, and other businesses. These activities result in wastewater discharges that vary by customer both in the volume and pollutant strengths of wastewater discharged. Non-residential customers are separated into three subgroups; significant dischargers, minor dischargers and other dischargers.

- Significant Dischargers meet one or more of the following criteria:
 - Are subject to categorical pretreatment standards;

⁴ Water use as reported in Customer Service MGT740. Household size as reported in 2002 San Francisco Housing Databook.

- Discharge more than 25,000 gallons per day excluding sanitary, noncontact cooling and boiler blowdown wastewater;
- Discharge wastewater accounting for 5% or more of dry weather 5-day Chemical Oxygen Demand (COD) / Total Suspended Solids (TSS) capacity of the treatment plant(s); or
- Discharge wastewater that in the opinion of the General Manager will adversely affect the sewerage system by causing interference, passthrough of pollutants, sludge contamination or endangerment of City workers.

SFPUC samples the wastewater of significant dischargers on a regular basis, typically every 6 months, to assess their discharge characteristics (total suspended solids, chemical oxygen demand, and fats, oil and grease). Significant dischargers are billed at a rate based on the volume of wastewater discharged and their particular wastewater characteristics.

- Minor Dischargers contribute more than 10,000 gallons per day whose discharges are regulated by standards other than EPA pretreatment standards. Minor dischargers are monitored and the discharges sampled on periodic basis.
- Other Dischargers are not monitored or sampled. These dischargers are
 placed into one of 11 different commercial/industrial profiles ("Standard
 Industry Classification" or SIC), each of which has a specifically calibrated
 rate for its discharge characteristics.

In addition to the Wastewater Enterprise's Residential and Non-residential customers, the Wastewater Enterprise supplies wholesale sewer service to three special districts: North San Mateo County Sanitation District, Bayshore Sanitary District, and the City of Brisbane. These districts are billed in accordance with the provisions of the Joint Powers Agreements between the respective districts and the City and County of San Francisco. North San Mateo County Sanitation District is billed using the same rates as the Wastewater Enterprise's retail customers. Bayshore Sanitary District and the City of Brisbane are billed on a volumetric basis reflecting proportionate share of costs. The rates and charges for Bayshore Sanitary District and the City of Brisbane are contractual and adjusted annually.

Estimated Wastewater Volumes

The amount of sewage an individual customer discharges into the sewer system is estimated by multiplying the customer's water use (as measured at the water meter) by the customer's "flow factor". The flow factor is the estimated percentage of metered water that is discharged to the sewerage system as wastewater. Most SFR customers are assigned a flow factor of 90%. Since FYE 2005, MFR customers have been assigned to a flow factor of 95%. Non-

residential customers are assigned a flow factor of 90%. Customers who can demonstrate that a lower percentage of their water use is being returned to the sewerage system as wastewater, such as irrigation use, can request their flow factor be evaluated for possible reduction.

In recent years, the volume of sewage treated by the Wastewater Enterprise has steadily decreased. As shown in Table 30, wastewater volumes for residential and non-residential customers decreased by about 1% in FYE 2012 and 1% in FYE 2013.⁵ This downward trend is a result of successful water conservation efforts and several years of dry weather.

Table 30Historical Wastewater Discharge Volumes
Fiscal Years Ended June 30
(MCcf)

Customer Class	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013
Residential	18,734,213	20,089,613	20,009,742	19,901,857	19,609,603
Non-Residential	9,098,805	9,869,196	9,988,448	9,897,038	9,833,033
Total	27,833,018	29,958,809	29,998,190	29,798,895	29,442,636

For this report, volumes are expected to remain constant throughout the forecast period. The following table shows projected volumes.

Table 31
Projected Wastewater Discharge Volumes
Fiscal Years Ended June 30
(MCcf)

Customer Class	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Residential	17,636,844	17,636,844	17,636,844	17,636,844	17,636,844
Non-Residential	8,648,705	8,648,705	8,648,705	8,648,705	8,648,705
Total	26,285,549	26,285,549	26,285,549	26,285,549	26,285,549

Wastewater Strength Characteristics

In addition to discharged volumes, wastewater treatment facilities are sized to account for the concentration and quantity of pollutants that must be removed from wastewater during the treatment process. Therefore, as a means of developing equitable rates, cost responsibility is allocated to customer classes based on Flow as well as their contributed wastewater strength characteristics (ie "loadings"), as described below.

⁵ Historical wastewater discharge volumes are referenced from the audited FY2012-13 SFPUC Comprehensive Annual Financial Report (CAFR).

- Chemical Oxygen Demand (COD). As part of the treatment process, microbial organisms consume dissolved oxygen while assimilating or oxidizing the organic matter present in wastewater. COD measures the quantity of oxygen required for that process.
- **Total Suspended Solids (TSS).** TSS measures the quantity of suspended solids or non-filterable residue in the wastewater.
- Oil and Grease (O/G). Recoverable oil and grease (sometimes referred to as Fats, Oils and Grease, or "FOG") can coat the lining of sewers and, if not removed, obstruct or restrict the hydraulic capacity of the collection system.

Based on historical data, FYE 2014 projected aggregate discharge volumes and loadings for Residential and Non-Residential customers are shown in Table 32.

Table 32FYE 2014 Projected Wastewater Volumes and Loadings (in thousands)

	Discharge			
	Units (Ccf)	COD (lbs)	TSS (lbs)	O/G (lbs)
Residential	17,637	75,270	30,702	9,536
Non-Residential	8,649	39,175	12,804	4,841
Total	26,286	114,445	43,506	14,377

Since the completion of 2009 Water and Sewer Rate Study, wastewater system loadings have changed as a result of legislative initiatives. The Fats, Oil, and Grease (FOG) Ordinance (2011), which discourages oil and grease discharge into the system, has resulted in lower loadings for Oil and Grease (O/G). Similarly, successful water conservation programs lead to increased loadings for Chemical Oxygen Demand (COD) due to stronger wastewater concentrations. For this report, loadings are expected to remain constant throughout the forecast period.

Revenues

As an enterprise department, the Wastewater Enterprise is required to generate sufficient revenues to fund its operating and capital expenses as well as comply with the conditions of federal grants, state loans, and bond covenants. The enterprise derives its revenues mainly from sewer service charges along with interest income and other non-operating activities. In FYE 2014, sewer service charges are projected to produce 99% of total revenues received. Each source of revenue is discussed in greater detail in the following paragraphs.

Table 33FYE 2014 Wastewater Enterprise Revenues (\$000)

	(\$)	(%)
Sewer Service Charges	\$250.3	98.9%
Interest Income	0.5	0.2
Rental and Misc. Income	2.3	0.9
Total	\$253.1	100.0%

Sewer Service Charges

Prior to 1977, the City funded sewer service costs principally from property taxes supplemented by a flat fee per connection. Since 1977, the sewer service charge has been the Wastewater Enterprise's primary source of revenue to fund operations. As a recipient of federal and state grants, the City is required to adopt sewer service charges based on each customer class' proportional use of the sewerage system and to establish a dedicated source of revenues to pay for operating the system.

Table 342009 Commission Approved Wastewater Rate Adjustments

Date	Retail Rate Adjustment
July 2009	7.0%
July 2010	7.0%
July 2011	5.0%
July 2012	5.0%
July 2013	5.0%

Residential

Currently, Residential sewer service customers are billed based on an inclining block rate structure where a set volume of monthly discharge per dwelling unit is charged at one rate and discharge units beyond that volume threshold are billed at a higher rate. These inclining blocks are often referred to as "tiers."

The SFPUC first adopted an inclining block rate structure in 1978, and a similar two-tiered structure is in practice today. For a period between FYE 2006 and FYE 2009, the SFPUC billed sewer services based on three tiers with the third tier set at five or more monthly discharge units per dwelling unit. Currently, the first tier is applied to the first three units of monthly discharge per dwelling unit, and all additional units of monthly discharge per dwelling unit are billed at a higher rate. For Multiple Family Residential accounts, the billable use in each block is calculated by multiplying the allowed use by the number of dwelling units. For example, an account with ten dwelling units would be allowed 30 discharge units in the first tier and all other discharge units in the second tier. There is no adjustment for vacant units in Multi-Family dwellings.

Table 35FYE 2014 Residential Wastewater Rates

	Single-Family	Multi-Family
	Residential	Residential
	(per Ccf)	(per Ccf)
Tier 1 (0-3 Ccf)	\$7.90	\$8.25
Tier 2 (3+ Ccf)	\$10.53	\$11.01

In the SFPUC's constant drive to increase ratepayer equity, staff proposes to phase-out the inclining block rate structure for residential wastewater rates over the next four years, beginning in FYE 2015, into a uniform wastewater rate. The detail behind this proposed change is further discussed in the "Rate Design" section of this chapter.

Non-Residential

For non-residential customers, the sewer service charge is calculated based on the volume wastewater discharged and the pounds of pollutants contained in that discharge. The charges for non-residential customers with sampled discharges are billed on the basis of their specific waste characteristics. Other non-residential customers are billed on the basis of the standard waste characteristics for their respective business activity, as assumed by their assigned SIC code. A customer or business activity which discharges high strength waste is charged a higher rate than a customer or business activity which discharges waste similar to residential customers.

In addition to the costs shared with residential customers, all non-residential customers are responsible for the costs of the Wastewater Enterprise's pretreatment program. The pretreatment program monitors customers with high strength waste to ensure prohibited substances are not discharged to the sewer system. Since the pretreatment intends to monitor non-residential strength waste, Residential customers do not bear any cost responsibility for the pretreatment program.

Table 36FYE 2014 Non-Residential Wastewater Rates

	Discharge Flow (Ccf)	COD (lb.)	TSS (lb.)	O/G (lb.)
Billable Constituent	\$6.6203	\$0.2178	\$0.8907	\$1.1145

As later discussed in the "Rate Design" section of this chapter, staff proposes to continue this rate structure for non-residential wastewater rates.

Interest Income

The Wastewater Enterprise earns interest income from the investment of available funds by the City Treasurer. Only the interest income earned from the investment of non-restricted funds is included. Interest income earned from the investment of moneys in restricted funds such as bond funds may only be used for the purpose of the fund and are not available to meet day-to-day operating expenses. Based on the current yield on investments made by the City Treasurer and projected fund balances, it is projected that investment income earned by unrestricted funds in FYE 2014 will be approximately \$0.5 million.

Rental Income and Miscellaneous Income

The Wastewater Enterprise operates the Southeast Community Facility that was built to partially offset the adverse impacts to the Bayview-Hunter's Point community resulting from the expansion of the Southeast Water Pollution Control Plant. Activities conducted at the neighborhood center include college courses, job skills training, child day care, senior day care, and community meetings. The Wastewater Enterprise's real estate division charges for the use of the facility. The rental charge is intended to recover the costs of support services provided at the facility. The annual income from rents charged at the Southeast Community Facility and other Enterprise properties is projected to be \$0.9 million for FYE 2015 through FYE 2018.

The Wastewater Enterprise receives other miscellaneous income from Biofuel, penalty fees, selling Enterprise fixed assets, and other reimbursements. The annual total for rental and miscellaneous income from all sources is projected to be \$2.3 million for FYE 2015 through FYE 2018.

Total Revenues

The following table shows projected revenues for the Wastewater Enterprise. These projections assume no change in the current FYE 2014 rate.

Table 37
Projected Operating and Non-Operating Revenues under Current Rates
Fiscal Years Ended June 30
(\$000)

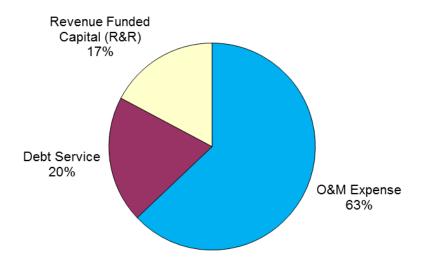
	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Wastewater Service Charges	250,320	252,120	252,120	252,120	268,852
Interest Income	463	899	1,123	1,467	1,552
Rent and Other Misc. Revenues	2,300	2,300	2,300	2,300	2,300
Total	253,083	255,319	255,543	255,888	272,704

The projected revenues are based on projected volumes of wastewater discharge and the schedules of rates in effect in each year. Water volume sales, and subsequently wastewater discharge volumes are projected to remain flat over the projection period. Interest earnings assume increasing annual yields, from 0.75% in FYE 2014 to 2.0% in FYE 2018. Other income, including rental income, is assumed to increase at a 3% inflation rate over the projection period.

Expenses

The Wastewater Enterprise's annual operating budget includes operation and maintenance costs, repair and replacement costs for existing equipment and facilities, and debt service on bonds and loans used to finance capital improvements. Each expense component is discussed in greater detail in the following paragraphs. As illustrated in Figure 3, operations and maintenance costs are by far the largest component of the Wastewater Enterprise's expenses.

Fye 2014 Wastewater Enterprise Expense Breakdown



The following table summarizes the Enterprise's expense components for the five most recent fiscal years.

Table 38Historical Operating Expenses
Fiscal Years Ended June 30
(\$000)

	F 1 E 2009	FIE ZUIU	FIE ZUII	FIE ZUIZ	F1E 2013
O&M Expense	123,258	126,630	129,598	137,500	143,800
Debt Service	66,780	66,834	61,386	44,000	42,661
Revenue Funded Capital (R&R)	27,694	25,075	17,100	33,825	36,781
Total	217,732	218,540	208,084	215,325	223,242

Operation and Maintenance Expense

The Wastewater Enterprise operates and maintains two year-round wastewater treatment plants, one wet-weather facility, 27 pump stations, 8 deep water outfalls that discharge the treated water into the San Francisco Bay and Pacific Ocean, and approximately 1,000 miles of sewers throughout the City. The operation and maintenance costs of the wastewater system includes labor salaries and fringe benefits, material and supplies, treatment chemicals, energy, sludge disposal, and services of other City departments (including the SFPUC support bureaus which provide billing, customer service, financial, information technology, and human resource services). The projected FYE 2014 cost to operate and maintain the wastewater system, not including Debt Service and Revenue-funded capital (R&R), is \$155.4 million. Labor-related expenses are the largest component of Operating and Maintenance Expenses and are projected to grow 3% annually. All other components of Operating and Maintenance Expenses are projected to grow at 3% per year during the forecast period, in accordance with the Ratepayer Assurance Policy.

Debt Service

The SFPUC finances major capital improvements, in part, by issuing debt for two primary reasons. First, given the size of the capital program, the SFPUC does not have the available financial reserves that would otherwise be required to fund the capital improvement program, nor would it be reasonable to increase the water rates and charges in order to cash fund these improvements. Second, spreading the debt service costs for long-lasting projects over the repayment period provides intergenerational equity by effectively spreading the financial burden between both existing and future users of the system. Debt service includes principal and interest payments on revenue bonds used to finance system improvements.

The SFPUC has existing debt obligations from past capital projects that were debt financed. The annual payments for existing debt are calculated on a fiscal year basis and are projected assuming a term of 30 years, annual interest rate of 5 percent and three years of capitalized interest. Because the SFPUC uses three years of capitalized interest, debt service payments begin three years following the date of issuance. This delays the impact to annual rate revenue requirements until the asset is built and replaced into service. This use of long-term debt is a reasonable approach as it also allows the SFPUC to more accurately match the capital expenditures with the ratepayers benefitting from the projects by having both existing and future customers pay for these improvements.

In addition to debt service payments on existing debt, the Wastewater Enterprise has developed a \$300 million commercial paper program and anticipates issuing up to \$2 billion in revenue bonds over the next 4 years to fund repair and replacement projects (R&R) as well as capital improvements to

upgrade aging infrastructure and ensure the reliability and performance of the sewer system, primarily through the Sewer System Improvement Program. Table 39 summarizes the projected annual debt service costs of the utility including both existing and future debt.

Table 39Wastewater Enterprise Projected Annual Debt Service
Fiscal Years Ended June 30
(\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Projected Debt Service	48,932	48,874	71,063	77,877	108,240

Sewer System Improvement Program

The Sewer System Improvement Program (SSIP) is a 20-year, multi-billion dollar citywide investment required to upgrade our aging sewer infrastructure to ensure a reliable and seismically safe sewer system now and for generations to come. The SSIP is a series of major capital improvement projects that will bring the City's wastewater and stormwater system into a state of good repair, and meet Commission-endorsed levels of service goals.

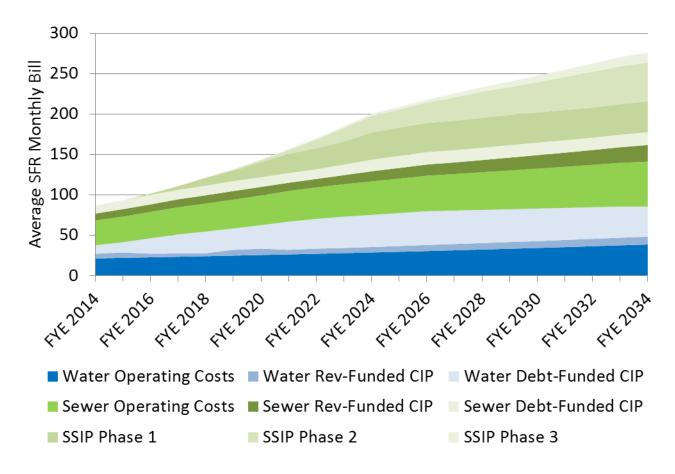
After several years of public feedback and third-party expert analyses, SFPUC staff worked internally with a Program Management Consultant to develop Goals and Levels of Service which identified project priorities to:

- 1. provide a compliant, reliable, resilient and flexible system that can respond to catastrophic events;
- 2. integrate grey and green infrastructure to manage stormwater and minimize flooding;
- 3. provide benefits to impacted communities:
- 4. modify the system to adapt to climate change;
- 5. achieve economic and environmental sustainability; and
- 6. maintain ratepayer affordability.

In August 2012, the Commission endorsed these SSIP Goals and levels of service, validated the scope and phased implementation approach for the overall \$6.9 billion SSIP Program, and authorized SFPUC staff to move forward with planning and development on a proposed Phase 1 set of SSIP projects representing \$2.7 billion. Subject to Commission and Board of Supervisors consideration of project environmental analysis and actions to approve project budgets, construction of Phase I projects and implementation of projects in Phases II and III would occur over varying time periods over the next 20 years.

In terms of the average SFPUC combined Single Family Residential bill⁶, Chart 5 illustrates the portion of the bill tied to existing and projected debt service. Beginning in FYE 2016, a portion of the projected debt service is tied to the initial project funding associated with SSIP Phase 1. Subsequently, financial projections illustrate the long-term projected debt service associated with financing all three phases of the SSIP, assuming the Commission approves Phases 2 and 3.

Chart 5
Average Monthly SFPUC Combined SFR Bill (including SSIP Phase I)



Revenue Funded Capital

In addition to issuing debt, the SFPUC funds a portion of Repair and Replacement (R&R) capital projects through current year revenues. The amount of cash-funded capital projects is determined during the budget process and the Commission adoption of the Enterprise 10-Year Capital Improvement Plan (CIP). As a recipient of state and federal grants under the Clean Water Act, the

⁶ The SFPUC average combined (water and sewer) Single Family Residential bill is based on 6 Ccf of monthly consumption.

Enterprise is required to include annual funding for repairs and replacement as a part of its annual revenue requirement. The annual contribution is expected to be \$42.6 million in FYE 2014 and is projected to continue to increase at an annual rate of 3% over the next 5 years. These amounts are summarized in last row on Table 40.

Summary of Projected Expenses

The following table shows projected enterprise expenses based on the adopted budgets for FYE 2015 and FYE 2016. Operation and maintenance expenses in FYE 2017 and subsequent years are projected to increase at an annual rate of 3%. Debt service costs assume debt for the 10-Year CIP is issued during the forecast period. As discussed earlier, part of the projections account for additional expenses related to the proposed Phases I and II of the SSIP, assuming Commission approval of SSIP Phase II.

Table 40
Wastewater Enterprise Projected Expenses
Fiscal Years Ended June 30
(\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
O&M Expense	155,400	150,174	154,679	159,622	164,464
Debt Service On Exisiting Bonds	48,932	48,874	60,027	48,783	47,026
Debt Service on SSIP Bonds Subtotal Debt Service	48,932	48,874	<u>11,036</u> 71,063	29,094 77,877	61,214 108,240
Revenue Funded Captial (R&R)	42,579	43,178	44,731	46,588	48,673
Total	246,911	242,226	270,473	284,088	321,377

Revenue Requirement

The annual expenditures for Operation and Maintenance, Debt Service, and Revenue Funded Capital make up the revenue requirement of the Wastewater Enterprise. However, to determine the revenue requirement for rate purposes, rental income and other miscellaneous income derived from selling fixed assets, biofuel, penalty fees, contractual fees, and other reimbursements, are subtracted from the annual revenue requirement. In addition, operating surpluses from prior years can be included in the calculation of net revenue requirement as a one-time source. The net revenue requirement represents the amount to be recovered from sewer service charges.

The revenue and revenue requirement forecasts for the five-year period from FYE 2014 to FYE 2018 are shown in Table 41 on the following page. The projected revenues and projected expenses shown are taken from Table 37 and Table 40, respectively.⁷

Table 41
Projected Revenues under Wastewater Enterprise Current Rates and Expenses
Fiscal Years Ended June 30
(\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Beginning Balance	88,203	103,700	116,793	101,863	73,662
Wastewater Service Charges	250,320	252,120	252,120	252,120	268,852
Interest Income	463	899	1,123	1,467	1,552
Rents and Other Misc. Revenues	2,300	2,300	2,300	2,300	2,300
Total Revenue	253,083	255,319	255,543	255,888	272,704
Expenditures					
O&M Expense	155,400	150,174	154,679	159,622	164,464
Debt Service	48,932	48,874	71,063	77,877	108,240
Revenue Funded Capital (R&R)	42,579	43,178	44,731	46,588	48,673
Total Expenditures	246,911	242,226	270,473	284,088	321,377
Net Revenues	6,173	13,093	(14,931)	(28,200)	(48,673)
Ending Fund Balance	103,700	116,793	101,863	73,662	24,989
Surplus (or Deficit)	6,173	13,093	(14,931)	(28,200)	(48,673)
Indenture Coverage		4.27	3.06	2.54	1.68
Current Coverage		2.15	1.42	1.24	1.00

⁷ The projected revenue requirement for the Wastewater Enterprise, over the forecasted period, is identical to the methodology outlined in the independent consultant cost of service study, as discussed in Chapter 5 of Appendix B. Modifications to the revenues and expenses are due to updated figures as presented in the Commission-adopted 10-Yr Financial Plan.

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In the above table, the deficit reflects the additional revenue required to meet projected costs. The last line of the table indicates current wastewater revenues are insufficient in FYE 2016 through FYE 2018 to meet the projected retail cost responsibility. Assuming positive net revenues in FYE 2014 and FYE 2015, the cumulative revenue deficiency over the forecasted period under existing rates is projected to be \$72.5 million.

In addition, to meet the annual revenue requirement, wastewater revenues must also meet indenture debt service coverage requirements. By indenture, Wastewater Enterprise revenues must be sufficient to maintain at least 1.25 times coverage ratio of annual debt service, inclusive of reserves, in any given year. In addition, Enterprise revenues must also be at least 1.00 times coverage ratio excluding reserves.

At a minimum, in order to meet revenue and coverage requirements in the forecasted period, the wastewater rates must be adjusted as shown in Table 42.

Table 42
Minimum Required Wastewater Enterprise Rate Adjustments (Unsmoothed)
Fiscal Years Ended June 30
(\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024
Annual Rate Adjustment	N/A	0%	0%	0%	7%	16%	36%	18%	14%	8%	4%
Cumulative Adjustment	N/A	0%	0%	0%	7%	23%	67%	98%	126%	144%	155%
Indenture Coverage		4.27	3.06	2.54	1.68	1.25	1.25	1.25	1.25	1.25	1.25
Current Coverage		2.15	1.42	1.24	1.00	1.07	1.34	1.28	1.23	1.19	1.18

Although the rate increases above meet all revenue and bond coverage obligations and result in adequate reserves within the four year rate-setting period, beyond FYE 2018, expenditures are projected to increase with annual debt service payments related to funding of the SSIP. As presented in chart 5, debt service expenditures are projected to increase significantly over the next 10 years. These investments and associated debt service, along with inflationary operational costs, result in increased revenue needs in future years and higher necessary rate increases.

To avoid abrupt rate increases after FYE 2018, it is recommended that rates are increased in advance of this requirement. Likewise, staff proposes smoothing the anticipated rate increases beyond the 4-year forecasted rate period to reduce the need for a significant rate increase in a single year and

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⁸ FYE 2014 wastewater revenues are projected to sufficiently meet the annual revenue requirement due to a previously adopted 5% wastewater rate increase, effective July 1, 2013, as a part of the 2009 5-year sewer rate resolution.

support expenditure requirements after FYE 2018. In addition, staff proposes that rate increases be smoothed over a ten year period to align with the Wastewater Enterprise's balanced 10-Yr Financial Plan, as passed by the SFPUC Commission in February 2014.

The smoothed rate increases proposed in Table 43 will result in sufficient funds to meet operational and capital expenditures and build an adequate reserve over the next four years to mitigate future rate spikes. The proposed rates also allow the SFPUC to more comfortably meet debt service coverage requirements.

Table 43
Minimum Required Rate Adjustments (Smoothed)
Fiscal Years Ended June 30
(\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Annual Rate Adjustment	N/A	5.0%	5.0%	7.0%	11.0%
Cumulative Adjustment	N/A	5.0%	10.3%	18.0%	30.9%
Indenture Coverage		4.53	3.61	3.63	3.05
Current Coverage		2.41	1.79	1.83	1.58

Cost Allocation

Functional Cost Allocation

Functional cost allocation apportions the revenue requirement by major function. As discussed earlier, wastewater treatment facilities are sized and operating costs incurred based on the volume of wastewater to be treated and the concentration and quantity of pollutants to be removed. As a means of developing equitable rates, cost responsibility is allocated to customer classes based on four functional cost categories: Flow of wastewater discharge, Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), and Oils and Grease (O/G), estimated for each customer class.

The cost allocation for the Wastewater Enterprise is based on flow of wastewater discharge measured in the system as well as the total amount (or "loadings") of COD, TSS and O/G in the sewer system. Setting rates based on these variable components further helps the SFPUC to exceed the target 70/30 split for variable and fixed revenues, set by the California Urban Water Conservation Council through their Best Management Practice 1.4.

- **Flow.** Operating and capital costs incurred by the wastewater system to handle the quantity of flows discharged to or collected by the system.
- Chemical Oxygen Demand (COD). Operating and capital costs incurred by the wastewater system required to oxidize organic matter present in wastewater.
- Total Suspended Solids (TSS). Operating and capital costs incurred by the wastewater system to necessary to remove suspended solids or non-filterable residue in the wastewater.
- *Oil and Grease (O/G).* Operating and capital costs incurred by the wastewater system required to recover oil and grease in the wastewater.

The 2014 SFPUC Water and Wastewater Utility Study allocated costs to the above functional cost categories by determining percent allocations for existing assets, debt service, and operations and maintenance. Costs were identified and allocated to each billable constituent for each process within each treatment facility. For example, the operations and maintenance cost allocation for COD is derived from the materials, power, chemical costs, and labor at each plant associated with that step in the treatment process. Similarly, COD's capital cost allocation includes the associated costs of planning, engineering, and constructing treatment and collection facilities related to this step in the treatment process.

Based on the analysis described, the result of the functional allocation is presented in Figure 4.

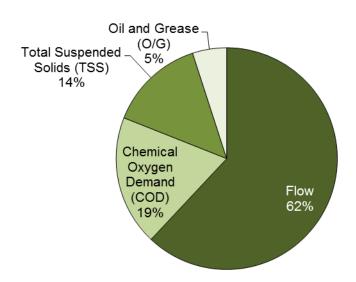


Figure 4
Wastewater Enterprise Functional Cost Allocation

Unit Cost and Customer Allocation

The unit costs of service for Flow, COD, TSS, and O/G are developed by dividing the total annual costs allocated to each of the four functional cost components by the total annual service units of the respective component. As discussed in earlier sections, volume and loadings (i.e. service units) are expected to remain constant throughout the forecast period.

- Flow: Flow units of service are based on annual wastewater discharge in Ccf.
- **Chemical Oxygen Demand (COD):** COD units are based on the measured volume in pounds of organic pollutants oxidized and treated in wastewater.
- Total Suspended Solids (TSS): TSS units are based on the measured volume in pounds of suspended solids or non-filterable residue recovered from wastewater.
- *Oil and Grease (O/G):* O/G units are based on the measured volume in pounds of oil and grease removed from wastewater.

Table 44

FYE 2015 Projected Wastewater Enterprise Functional Unit Costs
(\$/unit)

	Flow (Ccf)	COD (lbs)	TSS (lbs)	O/G (lbs)
Allocation Percentage	62%	19%	14%	5%
Total Units	26,285,549	114,444,520	43,506,591	14,377,184
Unit Cost	\$6.1451 per Ccf	\$0.4394 per lb COD	\$0.8282 per lb of TSS	\$0.8670 per lb of O/G

Customer Class Allocation

The unit costs of each billable constituent are then applied to each customer class' projected use and accounts using historical customer class data to derive customer class allocations. Costs are then allocated to each customer class based on their respective projected discharge to reflect their proportional use of the overall system.

Table 45Projected Wastewater Discharge Volumes
Fiscal Years Ended June 30
(MCcf)

Customer Class	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Residential	17,636,844	17,636,844	17,636,844	17,636,844	17,636,844
Non-Residential	8,648,705	8,648,705	8,648,705	8,648,705	8,648,705
Total	26,285,549	26,285,549	26,285,549	26,285,549	26,285,549

Based on the new wastewater revenue requirement and proposed cost allocations, there will be a cost shift beginning in FYE 2015 toward Residential customer classes and away from Non-Residential customers. This shift is primarily due to changes in the cost allocation methodology from the 2009 Water and Sewer Rate Study, and also a result of recent changes to the proportional share of loadings between Residential and Non-Residential customers.

The functional cost allocation process allows the SFPUC to recover a proportionate share of annual costs related to capital and O&M from each customer class based on their individual flow and loading discharges.

Rate Design

As noted earlier in this report, in February 2012, the SFPUC approved the SFPUC Rates Policy which states that all "budgets, rates, fees, and charges" will conform to the four key policy principles:

- Conservation
- Simplicity
- Stability
- Fairness

Given these multiple and, at times, competing principles, selection of an appropriate rate structure is complex. There is no single structure that meets all objectives equally, nor are all objectives or principles valued the same across utilities or customers. Each criteria or principle has merit and plays an important role in the rates implementation and overall effectiveness. These principles were discussed at length throughout the development of the rates proposal.

The proposed residential and non-residential wastewater rates were analyzed and reviewed as a part of the 2014 SFPUC Water and Wastewater Cost of Service Study. The proposed rates reflect the independent consultant recommendation on rate design.

Residential Wastewater Rates

In developing a proposal for Residential wastewater rates, the SFPUC considered a number of different rate structures, including:

- Flat structure: Under a flat rate structure, the service charge is a fixed fee
 regardless of the units wastewater discharged. A flat rate is easy to
 communicate and administer and provides a reliable, predictable revenue
 stream for utilities, since collections are not determined by consumption.
 However, a flat rate provides a weak conservation price signal and is not
 equitable across small and large dischargers. In some cases, a flat rate may
 not be as affordable for smaller dischargers.
- Uniform structure: Under a uniform rate structure, the price per unit is the same for all units of wastewater discharged. A uniform rate is easy to communicate and administer but provides a weak conservation price signal. Although a uniform rate structure does not account for costs incurred to meet peak demands in wastewater discharge, the SFPUC's wastewater system's peak capacity requirements are driven primarily by wet weather flows into the system, rather than strictly incremental dry weather customer discharges.

• Inclining block structure (ie tiers): An inclining block structure accounts for costs incurred to meet peak demands and also encourages conservation by charging a higher price per block as consumption increases. Depending on the number of blocks and the differential between blocks, an inclining block rate structure can provide a strong conservation price signal. However, since the wastewater system's peak demands are not primarily caused by incremental discharges, there is not a strong causal connection that ties peak demand costs with an inclining block or tiered rate. This change in interpretation is discussed below in more detail.

Unlike the Water system where water peak demands are a result of incremental water consumption, wastewater system peak demands are not driven by incremental discharge. Rather, wastewater peak costs are driven primarily by wet weather discharge flows, which are not currently tied to the wastewater cost allocation. Because there is not a clear nexus between wastewater peak costs and incremental discharge, recovering peak costs through a second tier is not an accurate means of cost recovery under the requirements of Proposition 218.

After considering the features of alternative rate structures, the SFPUC Rates Policy principles, and requirements of Proposition 218, the SFPUC proposes to phase-out the existing two-tier wastewater rate structure and phase-in a uniform wastewater rate structure over the 4-year rate proposal period. Although a two-tier wastewater rate structure has historically achieved the conservation values of the SFPUC, the proposed phase-in approach to a uniform rate represents the SFPUC's constant drive to increase ratepayer equity. To avoid producing undue impact to the current ratepayers, the current Residential wastewater tiers will progressively phase-out beginning in FYE 2015 to eventually reach a uniform wastewater rate effective in FYE 2018. This change will not only reflect a stronger, more defensible cost nexus, but will also align the SFPUC with other wastewater utility best practices across California.

Non-Residential Wastewater Rates

Unlike Residential customers who have similar domestic discharge characteristics, Non-Residential customers discharge varying pollutant types depending on the type of business. Therefore, in addition to contributed discharge flow, Non-Residential customers are assessed separately for each billable constituent discharged into the wastewater system.

As discussed in earlier sections, Non-Residential wastewater costs are allocated between four cost categories including, the unit costs of Flow, Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), and Oil and Grease (O/G).

The Flow unit cost is billed based on the assumed discharge or return to the SFPUC sewer collection system. The calculated Flow unit represents 100 cubic feet (1 Ccf) of discharge flow, which is derived by adjusting metered water usage by a standard discharge factor (90 percent for Non-Residential).

The strength-based unit costs are billed based on the pounds or loadings of COD, TSS, and FOG returned to the system. These loadings are identified through individual sampling of significant dischargers or based on standard measures for customers engaged in similar business activities. These similar customer types are grouped under Standard Industry Classification code (SIC codes). Non-Residential customers are assigned and billed to one of SFPUC's eleven SIC code groups, each with assumed pollutant loadings per business type. The complete list of the SFPUC's SIC codes are displayed below.

Table 46SFPUC Designated SIC Code (Standard Industry Classification) Groups

SIC Group	COD (mg/l)	TSS (mg/l)	O/G (mg/l)
SIC Group 1	0	0	0
SIC Group 2	194	56	26
SIC Group 3	640	239	63
SIC Group 4 ¹	684	279	85
SIC Group 5	641	224	86
SIC Group 6	396	59	100
SIC Group 7	1387	171	112
SIC Group 8	1539	181	125
SIC Group 9	1616	284	137
SIC Group 10	1153	303	251
SIC Group 11	4921	1371	559

¹SIC Group 4 represents standard domestic strengths assumed for all Residential

The SFPUC has not updated its flow and pollutant loadings assumptions for SIC codes in several years. In order to do so, the SFPUC will be will be revisiting and revising SIC loadings as necessary over the next few years.

Although the wastewater system is largely unchanged since the 2009 Water and Sewer Rate Study, aggressive conservation and other factors or events may cause a greater shift in the concentration assumptions in the future, most relevant, a long-term drought. As of January 2014, the SFPUC has asked customers to voluntarily decrease water consumption by 10%. Due increased water conservation, there might be a further shift in concentration due to the constant amount of loadings discharged into the system with reduced flow.

Proposed Wastewater Rates Schedule

The proposed Residential and Non-Residential wastewater rates discussed above are summarized in Tables 47, 48, and 49, which provide the overall rate schedule from FYE 2015 to FYE 2018. The rates for FYE 2015 are escalated annually based on the revenue requirement findings proposed in the "Revenue Requirement" section (See Table 43).

Table 47 Proposed Wastewater Rates

	Current	Proposed			
	Rate	FY 2015	FY 2016	FY 2017	FY 2018
Single-Family Residential					
First 4 Ccf/Month	\$7.90 ¹	\$9.06	\$9.82	\$10.84	\$12.40 ³
All Additional	\$10.53 ¹	\$11.23	\$11.34	\$11.66	\$12.40 ³
Multiple-Family Residential					
First 3 Ccf/DU ² /Month	\$8.25	\$9.24	\$9.95	\$10.91	\$12.40 ³
All Additional	\$11.01	\$11.48	\$11.51	\$11.75	\$12.40 ³
Non-Residential					
Volume per CCF	\$6.62	\$6.15	\$6.45	\$6.90	\$7.66
COD per lb.	\$0.22	\$0.44	\$0.46	\$0.49	\$0.55
SS per lb.	\$0.89	\$0.83	\$0.87	\$0.93	\$1.03
O/G per lb.	\$1.11	\$0.87	\$0.91	\$0.97	\$1.08

¹Current Tier 1 for first 3 Ccf/month, current Tier 2 for all additional above 3 Ccf

The proposed rates will result in charges for FYE 2015 that are competitive with the rates charged by other utilities, as illustrated in the Chart 6. The chart shows the average bill for a Single Family Residential customer across multiple agencies.

²DU = Dwelling Unit

³In FY 2018, Tier 1 and Tier 2 will be a uniform rate for all wastewater discharge units

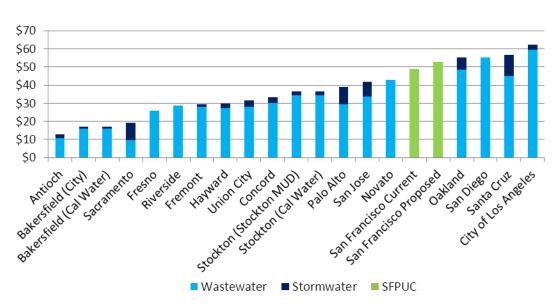


Chart 6
Average FYE 2014 Monthly Wastewater Bill Comparison

Future Considerations

In addition to considering a number of different rate structures, the SFPUC also evaluated the possibility of segregating the wastewater service charge into dry weather and wet weather-based wastewater rates. Because the SFPUC operates a combined sanitary and stormwater wastewater system, the SFPUC considered separating a wet weather rate component from the current wastewater service charge. This would result in a separate dry weather rate based on discharged flow, and a wet weather rate based on contributions to non-point source runoff. The separation of rates would provide transparency and better communicate to the ratepayers the benefit received by treating wet weather runoff. This approach also allows the SFPUC the ability to show the importance of treating wet weather flows due to street pollutants.

However, at this time due to administrative and data limitations and a desire for extensive stakeholder outreach and input, the SFPUC does not propose a separate wet-weather cost allocation for wastewater rates at this time. The SFPUC will continue to take the necessary steps to determine a comprehensive wet weather allocation and cost recovery methodology for future consideration.

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Capacity Charges

As the SFPUC's system has been built out over many years, preceding generations of ratepayer revenue have been utilized to build the system we have today. Capacity Charges are designed to recover a fair and proportional share of the cost to provide capacity to serve future users, and is imposed as a utility best practice condition of service for new usage, increase in usage, or change in usage. The SFPUC adopted a Wastewater Capacity Charge in July 2005 and a Water Capacity Charge in 2007.

Capacity Charge Calculation

Capacity Charges are calculated by dividing existing ratepayer equity by the total available capacity of the water or wastewater system. Ratepayer equity is defined as the value of the existing system including both net capital assets and fund balance. Available capacity is defined as the total capacity, expressed in Meter Equivalents (MEs), to be served by the system.

Using the approach established in 2005 when the SFPUC first developed capacity charges, capital asset values were determined first by escalating original costs to current dollars using the Engineering News Record Construction Cost Index, an industry-standard construction cost index. Total capital asset value includes construction work-in-progress less depreciation, outstanding debt principal and less any grant funding. Total ratepayer equity for the Water and Wastewater Enterprises, as detailed in chapter 7 of the independent consultant report, 2014 SFPUC Water and Wastewater Cost of Service Study, is shown in the below tables:

Water Enterprise Ratepayer Equity - FYE 2013

	Trended Original Cost
Land, Building & Equipment	\$3,747,151,725
plus: Construction Work-in Progress	427,455,364
less: Accumulated Depreciation	(2,575,874,063)
less: Outstanding Bonds & Loans	(1,262,807,199)
less: Unamortized Grants	(136,340)
Net Capital Assets	\$335,789,487
plus: Deposits with Fiscal Agent	44,194,978
plus: Cash in Capital Projects Fund	303,759,730
plus: Unrestricted Reserves	102,876,633
Fund Balance	\$450,831,341
Total Water Ratepayer Equity	\$786,620,828

Wastewater Enterprise Ratepayer Equity - FYE 2013

	Trended Original Cost
Land, Building & Equipment	\$8,465,894,331
plus: Construction Work-in Progress	176,711,000
less: Accumulated Depreciation	(5,443,887,049)
less: Outstanding Bonds & Loans	(852,294,000)
less: Unamortized Grants	(755,023,383)
Net Capital Assets	\$1,591,400,899
plus: Deposits with Fiscal Agent	31,305,000
plus: Cash in Capital Projects Fund	251,439,000
plus: Unrestricted Reserves	91,561,000
Fund Balance	\$374,305,000
Total Wastewater Ratepayer Equity	\$1,965,705,899

System capacity is defined as the total capacity within the wastewater or water system available to serve system users. A hydraulic analysis of the SFPUC in-City and suburban retail system in 2007 found the maximum Water system capacity to be 127 million gallons per day, equivalent to 635,000 Meter Equivalents (MEs).

SFPUC wastewater treatment facilities have a total average dry weather flow (ADWF) capacity of 106 mgd. This capacity serves both customer discharges, as well as groundwater infiltration. After accounting for groundwater infiltration, the treatment capacity available to serve wastewater customers is 93.2 mgd. Assuming 200 gallons-per-day demand per 5/8" meter equivalent (ME), 93.2 mgd translates to 466,000 MEs.

Final Capacity Charges, calculated by dividing the ratepayer equity by available capacity and as determined in the independent 2014 SFPUC Water

and Wastewater Cost of Service Study are shown in the below table. Current SFPUC capacity charges are adjusted annually for inflation. As a result of these adjustments, the proposed capacity charge for Water is increasing only 4 percent. The proposed Wastewater capacity charge is increasing 20 percent. The primary drivers for the proposed increase in the Wastewater Capacity Charge are new assets, lower debt load and increased cash reserves for capital projects.

Table 52Proposed FYE 2015 Capacity Charges

	Water	Wastewater
Ratepayer Equity	\$786,620,828	\$1,965,705,899
Number of Meter Equivalents (ME)	635,000	466,000
Existing Capacity Charge	\$1,191	\$3,514
Proposed Capacity Charge	\$1,239	\$4,218
Proposed Increase	4%	20%

Water Capacity Charge

Currently, Water Capacity Charges for single-family and multi-family dwellings are assessed based upon either the individual unit square footage or meter size requirement, whichever results in a lesser charge. For commercial users, charges are based on the meter size. SFPUC staff proposes that Water Capacity Charges be determined based solely on meter size for all customer classes. Meter size accounts for required water flows and system pressure, which is based on the number of installed plumbing fixture units. As such, meter size provides an accurate estimate of the amount of demand placed on the system. Basing the Water Capacity Charge on meter size will also allow for a streamlined assessment and a reduced time needed to process capacity charges.

Table 53Proposed FY 2015 Water Capacity Charge Schedule

Meter Size	PROPOSED CHARGES FYE 2015
5/8 in	\$1,239
3/4 in	\$1,859
1 in	\$3,100
1-1/2 in	\$6,197
2 in	\$9,917
3 in	\$18,594
4 in	\$30,990
6 in	\$61,983
8 in	\$99,172
10 in	\$142,485
12 in	\$266,385
16 in	\$464,625

Wastewater Capacity Charges

Currently, Wastewater Capacity Charges are imposed based on square footage and by Standard Industrial Classification (SIC) code, which account for assumed wastewater flow and strength, respectively, by property type. SFPUC staff proposes that Wastewater Capacity Charges be based upon Water Meter Equivalents rather than square footage. While square footage is a commonly and readily accepted method for determining system capacity requirements for developments, Meter Equivalents provide a more direct estimation of wastewater flow discharged back to the system. Staff proposes that Wastewater strengths continue to be assessed by SIC code.

Based on the functional allocations outlined in the independent 2014 SFPUC Water and Wastewater Cost of Service Study, the functional components of the Wastewater Capacity Charge are shown in Table 54.

 Table 54

 Functional Components of the Wastewater Capacity Charge

Functional Component	Net Asset Value	Charge per ME
Flow	\$1,407,469,287	\$3,020
Chemical Oxygen Demand (COD)	\$313,669,857	\$673
Total Suspended Solids (TSS)	\$197,438,690	\$424
Fats, Oils & Grease (FOG)	<u>\$47,128,065</u>	<u>\$101</u>
Total	\$1,965,705,899	\$4,218

The SFPUC has established loading concentrations for given customer groups based on SIC code as shown in Table 55. To simplify the process of adjusting loading component capacity charges, loading ratios have been developed, based on residential loadings, and are presented in Table 56.

 Table 55

 Loading Concentrations for SFPUC Designated SIC Groups

SIC Group ¹	Load	ing Concentr	ation	L	oading Ratio	
	COD	TSS	FOG	COD	TSS	FOG
2	194	56	26	0.3	0.2	0.3
3	640	239	63	0.9	0.9	0.7
4	684	279	85	1.0	1.0	1.0
5	641	224	86	0.9	0.8	1.0
6	396	59	100	0.6	0.2	1.2
7	1387	171	112	2.0	0.6	1.3
8	1539	181	125	2.3	0.6	1.5
9	1616	284	137	2.4	1.0	1.6
10	1153	303	251	1.7	1.1	3.0
11	4921	1371	559	7.2	4.9	6.6

¹SIC Group 4 contains residential accounts with assumed concentrations of a representative EDU.

Based on the recommended charges per Meter Equivalent and SIC loadings, the proposed Wastewater Capacity Charges are shown in Table 51. Staff also propose that these capacity charges be adjusted, effective July 1 of each fiscal year, based on the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine. Utilizing a cost index will permit the capacity charge to be updated to reflect the current value of customers' equity without the need to make a determination of customer equity each year. SFPUC staff further proposes that these capacity charges be reviewed at least every 5 years as part of the Charter-required independent Water and Wastewater rate study.

Table 56
Proposed FYE 2015 Wastewater Capacity Charge Schedule

Meter Size	SIC 2	SIC 3	SIC 4	SIC 5	SIC 6	SIC 7	SIC 8	SIC 9	SIC 10	SIC 11
5/8 in	\$3,337	\$4,078	\$4,218	\$4,066	\$3,630	\$4,752	\$4,974	\$5,221	\$4,934	\$10,610
3/4 in	5,006	6,117	6,327	6,099	5,445	7,128	7,461	7,832	7,401	15,915
1 in	8,343	10,195	10,545	10,165	9,075	11,880	12,435	13,053	12,335	26,525
1-1/2 in	16,685	20,390	21,090	20,330	18,150	23,760	24,870	26,105	24,670	53,050
2 in	26,696	32,624	33,744	32,528	29,040	38,016	39,792	41,768	39,472	84,880
3 in	50,055	61,170	63,270	60,990	54,450	71,280	74,610	78,315	74,010	159,150
4 in	83,425	101,950	105,450	101,650	90,750	118,800	124,350	130,525	123,350	265,250
6 in	166,850	203,900	210,900	203,300	181,500	237,600	248,700	261,050	246,700	530,500
8 in	266,960	326,240	337,440	325,280	290,400	380,160	397,920	417,680	394,720	848,800
10 in	383,755	468,970	485,070	467,590	417,450	546,480	572,010	600,415	567,410	1,220,150
12 in	717,455	876,770	906,870	874,190	780,450	1,021,680	1,069,410	1,122,515	1,060,810	2,281,150
16 in	1,251,375	1,529,250	1,581,750	1,524,750	1,361,250	1,782,000	1,865,250	1,957,875	1,850,250	3,978,750

In addition to the above proposed rates and charges, staff also proposes the following modifications to the process by which capacity charges are assessed:

- 1. Calculate plumbing fixture units and demand load using the most recent version of the California Unified Plumbing Code.
- 2. Assess prior use credits to any assessed capacity charge based on the prior usage without regard to any time limit for such credit.
- 3. Capacity charges to be payable 100% prior to issuance of permit, though any plan changes will result in a revised capacity charge collection.
- 4. Effective date for capacity charge to be based on SFPUC final receipt date of the permit application and building plans.
- 5. The General Manager of the SFPUC will be authorized to make improvements to the capacity charge billing process.

Miscellaneous Fees and Charges

In addition to rates for water service, the Water Enterprise has fees and charges related to the provision of water service which is not of general system benefit and the fees for which are recovered directly from individual users. These fees and charges include, for example, new account fees, late payment penalties, and service and meter relocation charges.

The SFPUC establishes these fees and charges based on a periodic review of actual costs incurred to provide these services. The most recent cost-of-service review was made in FYE 2013 for meter connection fees and charges for FYE 2014. As part of the independent 2014 SFPUC Water and Wastewater Cost of Service Study, the SFPUC's cost rationale for water installation and other miscellaneous charges was reviewed and validated for proportionate cost recovery and consistency with industry practice. In the final report for the Cost of Service Study, the independent consultant recommended that the SFPUC adjust Water Service Installation Charges and Miscellaneous Fees using the Consumer Price Index (CPI) for annual inflation or the assumed average hourly rate.

As recommended in the independent consultant 2014 SFPUC Water and Wastewater Cost of Service Study, staff proposes that water service installation charges and miscellaneous fees be automatically adjusted each year by CPI as determined by the San Francisco Controller's Office. Staff also proposes that future cost allocations be revisited and reviewed at least every 5 years as part of the Charter-required independent Water and Wastewater rate study.

The proposed charges for meter resizing, shown in Table 57, are based on cost of service, inflated by the CPI as released by the Controller's Office. Meter size changes, as coordinated by the SFPUC's Customer Service group, will be based on the fixture count for the property being served such that the service will deliver adequate flow to support the requested size meter. All requests for meter decrease for services 3" and larger will be determined by the SFPUC's City Distribution Division. Cost estimates will be based on either the cost to resize the meter or to install a new service based on the age, location, and meter configuration of the existing service.

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⁹ Project Memorandum, Miscellaneous Charges, Carollo Engineers / Patricia McGovern Engineers, November 2013.

Table 57FYE 2015 Proposed Meter Resizing Charges

CHARGE TYPE	FYE 2014	СРІ	PROPOSED CHARGES FYE 2015
Decrease from existing 2" and smaller service pipes	\$1,460	2.58%	\$1,500
<i>Increase</i> from 2" copper service, to 1 1/2" or 2" meter	\$1,460	2.58%	\$1,500
<i>Increase</i> from 3/4" copper service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,460	2.58%	\$1,500
Increase from 1" copper or plastic service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,460	2.58%	\$1,500
Reset on meter with existing 2" or smaller copper or plastic service	\$1,110	2.58%	\$1,140

The proposed Water Service Installation Charges for single meters are shown in Table 58. These charges and fees are based on cost of service, inflated by the CPI as released by the Controller's Office.

Table 58FYE 2015 Proposed Water Service Installation Charges for Single Services

SIZE	TYPE	FYE 2014	СРІ	PROPOSED CHARGES FYE 2015
4.11	0: 1.10		0.700/	40.000
1"	Standard Service	\$8,630	2.58%	\$8,850
1 -1/2"	Standard Service	\$12,130	2.58%	\$12,440
2"	Standard Service	\$12,130	2.58%	\$12,440
3"	Standard Service	\$34,680	2.58%	\$35,570
4"	Standard Service	\$34,680	2.58%	\$35,570
6"	Standard Service	\$40,710	2.58%	\$41,760
8"	Standard Service	\$46,670	2.58%	\$47,870
1 -1/2"	Fire Service	\$11,540	2.58%	\$11,840
2"	Fire Service	\$11,540	2.58%	\$11,840
4"	Fire Service	\$22,790	2.58%	\$23,380
6"	Fire Service	\$26,990	2.58%	\$27,690
8"	Fire Service	\$30,960	2.58%	\$31,760
1"	Combination Service	\$8,630	2.58%	\$8,850
1 -1/2"	Combination Service	\$12,130	2.58%	\$12,440
2"	Combination Service	\$12,130	2.58%	\$12,440
1"	Non-Standard Service	\$8,630	2.58%	\$8,850
1 -1/2"	Non-Standard Service	\$12,130	2.58%	\$12,440
2"	Non-Standard Service	\$12,130	2.58%	\$12,440

The proposed Water Service Installation Charges for multiple meters are shown in Table 59. These charges are based on cost of service, inflated by the CPI as released by the Controller's Office.

Table 59FYE 2015 Proposed Water Service Installation Charges for Multiple Services

SIZE	TYPE FYE 2014		СРІ		CHARGES 2015	
		Primary	Secondary		Primary	Secondary
1"	Standard Service	\$7,060	\$3,440	2.58%	\$7,240	\$3,530
1 -1/2"	Standard Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730
2"	Standard Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730
3"	Standard Service	\$36,030	\$29,520	2.58%	\$36,960	\$30,280
4"	Standard Service	\$36,030	\$29,520	2.58%	\$36,960	\$30,280
6"	Standard Service	\$42,470	\$36,030	2.58%	\$43,570	\$36,960
8"	Standard Service	\$48,740	\$41,910	2.58%	\$50,000	\$42,990
1 -1/2"	Fire Service	\$9,410	\$5,580	2.58%	\$9,650	\$5,720
2"	Fire Service	\$9,410	\$5,580	2.58%	\$9,650	\$5,720
4"	Fire Service	\$23,340	\$17,000	2.58%	\$23,940	\$17,440
6"	Fire Service	\$27,780	\$21,440	2.58%	\$28,500	\$21,990
8"	Fire Service	\$32,070	\$25,710	2.58%	\$32,900	\$26,370
1"	Combination Service	\$7,060	\$3,440	2.58%	\$7,240	\$3,530
1 -1/2"	Combination Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730
2"	Combination Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730
1"	Non-Standard Service	\$7,060	\$3,440	2.58%	\$7,240	\$3,530
1 -1/2"	Non-Standard Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730
2"	Non-Standard Service	\$8,430	\$4,610	2.58%	\$8,650	\$4,730

The proposed Water Service Installation Charges for multiple meters are shown in Table 60. These charges are based on cost of service, inflated by the CPI as released by the Controller's Office. The SFPUC's City Distribution Division will establish the new location of the meter.

Table 60FYE 2015 Proposed Meter and Service Relocation Charges

CHARGE TYPE	PROPOSED CHARGES FYE 2015
Relocation of meter no more than 2 feet on existing 2" copper service	\$3,460
Relocation of meter no more than 2 feet on existing 1" copper or plastic service	\$2,100

The proposed Water Service Installation Charges for multiple meters are shown in Table 61. These charges are based on cost of service, inflated by the CPI as released by the Controller's Office. Continued violation of any water use restrictions may result in the discontinuance of water service by the Water Enterprise and a charge, based on the Service Turn-On Fee from Schedule W-44, prior to reactivation of service.

Table 61FYE 2015 Proposed Flow Restricting Installation Charges

CHARGE TYPE	FYE 2015 PROPOSED CHARGES
5/8" - 1"	\$245
1 1/2" - 2"	\$344
3" or larger	Actual cost for customization ¹

¹Flow Restricting Installations for meters 3" and larger charged at cost including materials, labor, equipment, overhead.

The proposed Miscellaneous Charges are shown in Table 62. These charges are based on cost of service, inflated by the CPI as released by the Controller's Office.

Table 62FYE 2015 Proposed Miscellaneous Charges

CHARGE TYPE	FYE 2015 PROPOSED CHARGES (\$)
Late Payment Penalty	0.5% per 30 days, or fraction thereof, on amount owed
Return Check Charge	\$96
New Account Charge	\$57
48-Hour Notice	\$50
Service Shut-Off	\$50
Service Turn-On	\$50
Lock Charge	\$14
Meter Test	\$325
Lien Fee	Set by Administrative Code
Builders & Contractors Connection	\$113
Meter Rental Deposit	\$800 for 1" meter; \$2,700 for a 3" meter as determined annually by the General Manger
Non-Reporting Charge	Charge equivalent to 25 units (Ccf) of water at the effective W-5 water rate per every delinquent month
Dock & Shipping Connection	\$231

Low Income Assistance Programs

To make SFPUC services affordable to low-income households, the SFPUC has implemented a number of assistance programs. The Community Assistance Program or CAP, implemented in FYE 2005, provides a 35% discount on wastewater service charges to eligible single-family households. The program was expanded in FYE 2008 to include a 15% discount on the water charges to eligible single-family households. The Low-Income Non-Profit Housing or LINPH discount, implemented in FYE 2006, provides a 15% discount on wastewater service charges to non-profit multiple-family housing accounts registered with the Mayor's Office of Housing. The program was expanded in FYE 2008 to include a 15% discount on the water charges to eligible non-profit multiple-family housing accounts. The Community House Program, implemented in 1994, provides a 50% discount on wastewater and was also expanded in FYE 2008 to include a 15% discount on water to Single Room Occupancy (SRO) hotels providing transitional housing to general assistance recipients and homeless individuals.

In 2006, the California Supreme Court in Bighorn v. Verjil held, in part, that Proposition 218 applied to publicly owned water and wastewater utility rates. Prior to this hearing, the cost of low income programs were funded from ratepayer revenues. The ruling established a precedent that ratepayer funds cannot be used as the revenue source for these assistance programs. The SFPUC funds low-income assistance programs with revenues from donations, the SFPUC's *Angel Fund*, and closed accounts.

Community Assistance Program (CAP): CAP provides a 35% discount on wastewater service charges and 15% on water charges to qualifying single-family residential (SFR) customers. The current CAP income eligibility guidelines are set at 200% of the Federal Poverty Guidelines based on total annual household income as shown in Table 63. The SFPUC began accepting CAP applications in July 2004. As of January 2014, 5,089 customers were enrolled in the program. Based on SFPUC Customer Service data, the number of single-family accounts is approximately 111,000 and the number of eligible accounts, based on data from the 2011 5-Year American City Survey provided by the Human Services Agency of San Francisco, is approximately 22,700. The current participation rate is approximately 4.6 percent of total single-family households. In FYE 2013, the average CAP participant who uses 7 Ccf of water per monthly billing period receives an average discount of approximately \$28 on their combined monthly bill.

Table 63
2014 Federal Poverty Guidelines
(Source: United States Department of Health and Human Services)

Household Size	200% Federal Poverty Guideline
1	\$23,340
2	\$31,460
3	\$39,580
4	\$47,700

Low Income Non-Profit Housing (LINPH): LINPH began in FYE 2006 to provide rate relief to low-income multi-family residential (MFR) residents in housing owned and operated by non-profit organizations. The LINPH discount provides a 15% discount on wastewater service charges and water charges to qualified low-income multi-family housing developments registered with the Mayor's Office of Housing (MOH). The program became effective midway through FY 2005-06. As of January, 2014, there were forty-six properties enrolled in the program. In FYE 2013, the average discount per bill was \$623.

Community Housing Program (CHP): CHP provides a discount on water and sewer service charges to boarding houses, motels, and hotels participating in the Mayor's Community Housing Program. This program provides transitional housing to homeless individuals and general assistance recipients. Participants enrolled in the program receive a fifty percent (50%) discount on wastewater and fifteen percent (15%) discount on water. In FYE 2013, 17 properties participated in the program and received an average monthly discount on water charges of \$253 and \$966 on wastewater charges.

Table 64 shows the projected cost of these programs through FYE 2018.

Table 64Projected Low-Income Assistance Program Cost (\$000)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Community Assistance Program	\$1,701	\$1,838	\$1,987	\$2,164	\$2,362
Low-Income Non-Profit Housing	\$363	\$392	\$424	\$462	\$505
Community Housing Program	\$262	\$279	\$297	\$322	\$355
Total	\$2,327	\$2,509	\$2,708	\$2,949	\$3,221

Conservation Programs

The SFPUC has developed programs to promote conservation and to provide rate relief to SFPUC customers. Through these programs the SFPUC works directly with customers to improve the efficient use of water and thus reduce their monthly bill.

The SFPUC has a number of conservation programs that provide financial and other assistance to customers. These programs include:

- Residential and commercial toilet rebates: Toilets account for approximately one-third of indoor water use. Upgrading to a high-efficiency toilet (HET) can reduce indoor water use by 16%. The SFPUC gives rebates of up to \$125 for each tank-style toilet and up to \$300 for each flushometer valve that replaces a high-flow toilets of 3.5 gallons per flush or more;
- Washing machine rebate: Clothes washers can account for more than 20% of indoor water use and the SFPUC and PG&E give rebates ranging from \$50 to \$200 on eligible water and energy efficient washers;
- Water wise evaluation: The SFPUC conducts free onsite inspections for large volume users and provides an analysis on water usage inefficiencies and undiscovered leaks and make recommendations for water conservation improvements;
- Fixture replacements: The SFPUC provides, without charge, kitchen/basin aerators, water-efficient showerheads, toilet flappers, toilet fill valves and garden spray nozzles;
- *Graywater subsidies:* The SFPUC offers a \$112 subsidy towards the cost of a laundry-to-landscape graywater kit.
- Graywater permit rebate program: For graywater projects that require a
 permit from the Department of Building Inspection, as is the case for all
 graywater systems except laundry-to-landscape, the SFPUC offer a rebate of
 up to \$225 towards the cost of the permit.

Appendix A: Schedules of Rates and Charges

Water Rate Schedules for Residential and Non-Residential Service

SCHEDULE W-1A: Single Family Residential Service within the City and County of San Francisco.

Applicable to single-family dwelling units served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter. For two-month billing periods the charge shall be twice the amounts shown.

	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Meter Size	Effective 7/1/14	Effective 7/1/15	Effective 7/1/16	Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Single-Family Residential	Charge per Ccf					
	FYE 2015	FYE 2016	FYE 2017	FYE 2018		
	Effective	Effective	Effective	Effective		
	7/1/14	7/1/15	7/1/16	7/1/17		
First 4 Units ¹ /DU ² /Month	\$4.86	\$5.45	\$6.00	\$6.42		
All Additional Ccf/DU/Month	\$6.52	\$7.31	\$8.05	\$8.62		

¹1 Unit = 1 Ccf of wastewater = 748 gallons

²DU = Dwelling Unit; All Single-Family Residential users have one DU per account

SCHEDULE W-1B: Multiple-Family Residential Service within the City and County of San Francisco.

Applicable to multiple-family accounts consisting of two or more dwelling units served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Multiple-Family Residential	Charge per Ccf			
	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
First 3 Units ¹ /DU ² /Month	\$4.98	\$5.58	\$6.14	\$6.57
All Additional Ccf/DU/Month	\$6.67	\$7.48	\$8.23	\$8.81
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				
² DU = Dwelling Unit	-			

SCHEDULE W-1C: Commercial, Industrial and General Uses within the City and County of San Francisco.

Applicable to commercial, industrial and other general uses served through a separate meter or bank of meters:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
	Elicotive I/I/I4	Liteotive IIIII	Elicotive I/I/10	Liteotive 17 17 17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Commercial, Industrial and other General Uses	Charge per Ccf			
	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
For all units ¹ of Water	\$5.79	\$6.49	\$7.14	\$7.64
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				

SCHEDULE W-2: Fire Service within the City and County of San Francisco

Applicable to straight fire service, required by the regulation of the San Francisco Fire Department or Underwriters having jurisdiction, installed and maintained according to the rules regulations and Specifications of the San Francisco Water Enterprise.

First: A Monthly Service Charge based on the size of the service.

Service Size	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective 7/1/14	Effective 7/1/15	Effective //1/16	Effective //1/1/
1 in	\$7.77	\$8.71	\$9.59	\$10.36
1-1/2 in	\$11.30	\$12.66	\$13.93	\$15.05
2 in	\$15.54	\$17.41	\$19.16	\$20.70
3 in	\$25.44	\$28.50	\$31.35	\$33.86
4 in	\$39.57	\$44.32	\$48.76	\$52.67
6 in	\$74.90	\$83.89	\$92.28	\$99.67
8 in	\$117.30	\$131.38	\$144.52	\$156.09
10 in	\$166.76	\$186.78	\$205.46	\$221.90
12 in	\$308.09	\$345.07	\$379.58	\$409.95

Second: If water is used for any purpose other than extinguishing accidental fires, the W-1C rates for water delivery shall apply.

SCHEDULE W-3A: Public Uses within the City and County of San Francisco

Applicable to Public Buildings, Parks and Other Metered Service: Schedule W-1C

For Street Sprinkling and Flushing when quantities are computed from records of tank wagons and billed as one amount: Schedule W-1C (no service charge to apply)

SCHEDULE W-3B: Interruptible Uses within the City and County of San Francisco.

Applicable to Interruptible Service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise:

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Interruptible Uses	Charge per Ccf			
	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
For all units ¹ of Water	\$5.25	\$5.88	\$6.47	\$6.93
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				

SCHEDULE W-4: Docks and Shipping Supply within the City and County of San Francisco.

Applicable to special shipping service, including hose truck and other special services, from open docks through common hydrants where delivery is not through a service and meter for which the customer is responsible:

First: A Docks & Shipping Connection Charge: See Schedule W-41

Docks and Shipping	Charge per Ccf			
	FYE 2015 FYE 2016 FYE 2017 FYE 2018			FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
For all units ¹ of Water	\$7.64	\$8.57	\$9.43	\$10.10
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				

SCHEDULE W-5: Builders and Contractors within the City and County of San Francisco.

Applicable to special shipping service, including hose truck and other special services, from open docks through common hydrants where delivery is not through a service and meter for which the customer is responsible:

First: A Builders and Contractors Connection Charge: See Schedule W-41

Second: A Meter Deposit: See Schedule W-44

Third: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17

Fourth: A charge for all Water Delivered based on monthly meter reading.

Builders and Contractors	Charge per Ccf			
	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
For all units ¹ of Water	\$6.95	\$7.79	\$8.57	\$9.17
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				

Fifth: Any customer who fails to report water consumption as required shall be assessed a non-reporting penalty equivalent to the cost of 25 units of water per month at the current W-5 volumetric rate.

SCHEDULE W-21: Single Family Residential Service outside the City and County of San Francisco.

Applicable to single-family dwelling units served through a separate meter or bank of meters: Schedule W-1A

SCHEDULE W-22: Fire Service outside the City and County of San Francisco

Applicable to straight fire service, required by the regulation of the San Francisco Fire Department or Underwriters having jurisdiction, installed and maintained according to the rules regulations and Specifications of the San Francisco Water Enterprise: Schedule W-2

SCHEDULE W-24: Non-Potable Water Service

Applicable inside and outside the City and County of San Francisco for non-potable water service when the customer furnishes all facilities necessary to convey the non-potable water from the San Francisco Water Enterprise's water supply reservoirs to the customer's point of use.

First: A Monthly Service Charge based on the size of the meter.

Meter Size	FYE 2015 Effective 7/1/14	FYE 2016 Effective 7/1/15	FYE 2017 Effective 7/1/16	FYE 2018 Effective 7/1/17
5/8 in	\$8.81	\$9.87	\$10.86	\$11.63
3/4 in	\$11.09	\$12.43	\$13.68	\$14.64
1 in	\$15.66	\$17.54	\$19.30	\$20.66
1-1/2 in	\$27.08	\$30.33	\$33.37	\$35.71
2 in	\$40.79	\$45.69	\$50.26	\$53.78
3 in	\$72.77	\$81.51	\$89.67	\$95.95
4 in	\$118.46	\$132.68	\$145.95	\$156.17
6 in	\$232.69	\$260.62	\$286.69	\$306.76
8 in	\$369.76	\$414.14	\$455.56	\$487.45
10 in	\$529.67	\$593.24	\$652.57	\$698.25
12 in	\$986.57	\$1,104.96	\$1,215.46	\$1,300.55
16 in	\$1,717.61	\$1,923.73	\$2,116.11	\$2,264.24

Non-Potable	Charge per Ccf			
	FYE 2015	FYE 2016	FYE 2017	FYE 2018
	Effective	Effective	Effective	Effective
	7/1/14	7/1/15	7/1/16	7/1/17
For all units ¹ of Water	\$2.24	\$2.51	\$2.76	\$2.95
¹ 1 Unit = 1 Ccf of wastewater = 748 gallons				

SCHEDULE W-25. Wholesale Use with Long Term Contract

First: A monthly service charge based on the type and size of the meter:

Meter Size	Disc/ Compound Meters	Crest Meters	Magnetic Meters	Turbine Meters
5/8 in	\$11.00			
3/4 in	\$18.00			
1 in	\$30.00			
1-1/2 in	\$43.00			
2 in	\$79.00			
3 in	\$158.00			
4 in	\$318.00	\$353.00		\$577.00
6 in	\$476.00	\$685.00		\$1,256.00
8 in	\$635.00	\$1,335.00	\$2,265.00	\$1,875.00
10 in	\$793.00	\$1,732.00		\$3,391.00
12 in	\$953.00	\$1,840.00	\$5,159.00	
16 in	\$1,270.00	\$5,628.00		\$7,215.00
18 in		\$6,133.00		
20 in		\$6,349.00		

The service charge for a battery of meters installed on one service in lieu of one meter or for a special type of meter shall be based on the size of single or multiple standard type meter of equivalent capacity.

Second: A charge for water delivered based on one-month's meter readings:

\$1,276.31 per acre-foot or \$2.93 per 100 cu. ft.

Third: An untreated wholesale water rate discount factor for Wholesale Customers receiving untreated water, based on one-month's meter readings:

\$139.39 per acre-foot or (\$0.32) per 100 cu. ft.

SCHEDULE W-31: Commercial, Industrial and General Uses outside the City and County of San Francisco.

Applicable to multiple-family residential, commercial, industrial and other general uses served through a separate meter or bank of meters: Schedule W-1C

SCHEDULE W-33. Public Uses Excluding Wholesale outside the City and County of San Francisco

Applicable to Public Buildings, Parks and Other Metered Service: Schedule W-1C

SCHEDULE W-34: Interruptible Uses outside the City and County of San Francisco.

Applicable to Interruptible Service when service can be interrupted for water shortages and other emergencies at the discretion of the Water Enterprise: Schedule W-3B

Connection Fees and Miscellaneous Fees & Charges

SCHEDULE W-40. Meter Resizing

Applicable to all water customers for meter resizing made at the customer's request except when such resizing is required to maintain service pressure or meet flow requirements.

For meter resizing not covered in the above or when, in the opinion of the Enterprise, any unusual conditions may result in costs more than 15% greater than the scheduled costs, the Enterprise reserves the right to charge the meter resizing on the basis of actual costs.

CHARGE TYPE	PROPOSED CHARGES FYE 2015
Decrease from existing 2" and smaller service pipes	\$1,500
Increase from 2" copper service, to 1 1/2" or 2" meter	\$1,500
<i>Increase</i> from 3/4" copper service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,500
Increase from 1" copper or plastic service and existing 5/8" or 3/4" meter, to or 3/4" to 1" meter	\$1,500
Reset on meter with existing 2" or smaller copper or plastic service	\$1,140

SCHEDULE W-41. Service Installations

Applicable to all water customers for service installations made at the customer's request.

Water Installation Service Charges For Single Services

Water Installation Service Charges For Single Services							
SIZE	TYPE	PROPOSED CHARGES FYE 2015*					
1"	Standard Service	\$8,850					
1 -1/2"	Standard Service	\$12,440					
2"	Standard Service	\$12,440					
3"	Standard Service	\$35,570					
4"	Standard Service	\$35,570					
6"	Standard Service	\$41,760					
8"	Standard Service	\$47,870					
1 -1/2"	Fire Service	\$11,840					
2"	Fire Service	\$11,840					
4"	Fire Service	\$23,380					
6"	Fire Service	\$27,690					
8"	Fire Service	\$31,760					
1"	Combination Service	\$8,850					
1 -1/2"	Combination Service	\$12,440					
2"	Combination Service	\$12,440					
1"	Non-Standard Service	\$8,850					
1 -1/2"	Non-Standard Service	\$12,440					
2"	Non-Standard Service	\$12,440					

Water Installation Service Charges For Multiple Services

SIZE	ТҮРЕ	PROPOSED FYE 20	
		Primary	Secondary
1"	Standard Service	\$7,240	\$3,530
1 -1/2"	Standard Service	\$8,650	\$4,730
2"	Standard Service	\$8,650	\$4,730
3"	Standard Service	\$36,960	\$30,280
4"	Standard Service	\$36,960	\$30,280
6"	Standard Service	\$43,570	\$36,960
8"	Standard Service	\$50,000	\$42,990
1 -1/2"	Fire Service	\$9,650	\$5,720
2"	Fire Service	\$9,650	\$5,720
4"	Fire Service	\$23,940	\$17,440
6"	Fire Service	\$28,500	\$21,990
8"	Fire Service	\$32,900	\$26,370
1"	Combination Service	\$7,240	\$3,530
1 -1/2"	Combination Service	\$8,650	\$4,730
2"	Combination Service	\$8,650	\$4,730
1"	Non-Standard Service	\$7,240	\$3,530
1 -1/2"	Non-Standard Service	\$8,650	\$4,730
2"	Non-Standard Service	\$8,650	\$4,730

SCHEDULE W-42. Meter and Service Relocations

Applicable to all water customers for meter and service relocations made at the customer's request.

CHARGE TYPE	PROPOSED CHARGES FYE 2015
Relocation of meter no more than 2 feet on existing 2" copper service	\$3,460
Relocation of meter no more than 2 feet on existing 1" copper or plastic service	\$2,100

SCHEDULE W-43. Flow Restricting Installations

Applicable to all water customers.

Violation of any water use restrictions by any customer may, after one written warning and in accordance with all applicable laws and legal restrictions, results in the installation of a flow restrictor device on the customer service line. The charge to install and remove the restricting device shall be as follows:

CHARGE TYPE	PROPOSED CHARGES (\$) FYE 2015
5/8" - 1"	\$245.00
1 1/2" - 2"	\$344.00
3" or larger	Actual cost for customization ¹

^{*}FYE 2015 Proposed Miscellaneous Charges are rounded to the nearest dollar.

Continued violation of any water use restrictions may result in the discontinuance of water service by the Enterprise and a charge of \$50.00 shall be paid prior to reactivating the service.

¹Flow Restricting Installations for meters 3" and larger are charged actual cost including materials, labor, equipment, and overhead.

SCHEDULE W-44. Service Fees

Except as noted, the following service fees are applicable to all water customers except wholesale customers.

LATE PAYMENT PENALTY

Any charge or fee not paid within 30 days shall be subject to a late payment penalty equal to one-half of one percent (1/2%) for each 30 days or fraction thereof on the amount owed. This late payment penalty shall also apply to wholesale customers.

RETURN CHECK CHARGE

\$96.00

A return check charge shall be applied to any account whose check payment is returned to us due to insufficient funds, closed accounts or any other valid reason why the customer's bank did not honor the check. This charge will be made for every such occurrence.

NEW ACCOUNT CHARGE

\$57.00

Any customer establishing a new account for water service shall be assessed a one-time fee to cover administrative costs. In addition, such customer may be required to make a refundable security deposit equal to the greater of two months estimated water charges or \$57.00. The deposit is refundable after twelve months of satisfactory payment history or termination of service and settlement of the final bill, whichever occurs first.

48-HOUR NOTICE \$50.00

Prior to shutting-off water service for non-payment, the Water Enterprise will post on the customer's premises a 48-hour notice. A charge of \$50.00 will be added to the amount owed to cover this cost.

SERVICE SHUT-OFF \$50.00

A shut-off of water service during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$50.00. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$55.00 or 110% of the effective charge.

SERVICE TURN-ON \$50.00

A service turn-on during normal business hours (eight a.m. to four-thirty p.m. daily except Saturday, Sunday and holidays) will be assessed a service charge of \$50.00. A shut-off or turn-on at times other than normal business hours will be assessed a charge of \$55.00 or 110% of the effective charge.

LOCK CHARGE \$14.00

Any customer whose service is shut-off for non-payment will also be charged for the cost of a meter lock installed in accordance with the Water Enterprise standard procedures.

METER TEST

Any customer who requests to test the accuracy of their water meter will be assessed a \$100 for the first test and a \$325 charge for any subsequent test within a 24-month period. If the meter is found to register more than the limit of error specified in the "Water Rules and Regulations Governing Water Services to Customers," the testing fee will be returned.

LIEN FEE

Any account with an outstanding balance of greater than \$50.00 and which is delinquent by more than one billing cycle may be recorded as a lien against the property. Any account recorded as a lien against the property will be assessed a lien fee as provided in the Administrative Code of the City and County of San Francisco.

BUILDERS & CONTRACTORS CONNECTION FEE

\$113.00

Any Builders and Contractors customer that connects to the system will be assessed a Builders and Contractors connection charge of \$113 to cover the administrative costs for connecting a meter.

DOCKS & SHIPPING CONNECTION FEE

\$231.00

Any Docks and Shipping customer that connects to the system will be assessed a Docks & Shipping connection charge to cover the administrative costs for setting up billing account and field work to provide connecting equipment.

METER RENTAL DEPOSIT

Any Builders and Contractors customer that connects to the system, and pays a Builders and Contractors connection fee, will also be assessed a meter deposit of \$800 for 1" meter and \$2,700 for a 3" meter, as determined annually by the General Manager. This deposit is refundable when the account is closed.

NO-REPORTING PENALTY FEE

Any Builders and Contractors customer that does not bring the rented meter in for reading and testing according to the meter reading schedule, will be assessed a penalty fee equivalent to 25 units (Ccf) of water at the effective W-5 water rate per every delinquent month.

MANUAL METER-READING FEE

\$5.00

Any customer who has opted out of automatic meter reads will be assessed a manual meter-reading charge to cover the cost of manual meter reading.

FOR SCHEDULES W-40 THROUGH W-44: The General Manager may each year adjust the fees and charges in schedules W-40 through W-44, without further action by the Commission, to reflect changes in the relevant Consumer Price Index. The price index adjustment shall not cause the charges to exceed the department's cost of providing the service.

Wastewater Rate Schedules for Residential and Non-Residential Service

SCHEDULE A-1.

This schedule shall apply to Single-Family Residential Users. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Single-Family Residential Users shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

	Proposed						
	Effective Effective Effect 7/1/14 7/1/15 7/1/16 7/1/1						
Single Family Residential							
First 4 Discharge Units per Month	\$9.06	\$9.82	\$10.84	\$12.40			
All Additional Discharge Units	\$11.23	\$11.34	\$11.66	\$12.40			

SCHEDULE A-2.

This schedule shall apply to Multiple-Family Residential Users. The rates under this schedule are based upon the typical strengths for Domestic Wastes, as determined by the General Manager. All Multiple-Family Residential Users shall be charged on the basis of discharge units in accordance with the schedule of rates as follows:

	Proposed							
	Effective Effective Effective							
	7/1/14 7/1/15 7/1/16 7/1/ ²							
Multi-Family Residential								
First 3 Discharge Units per Month	\$9.24	\$9.95	\$10.91	\$12.40				
All Additional	\$11.48	\$11.51	\$11.75	\$12.40				

SCHEDULE B.

Users, other than Residential Users charged under Schedule A of this Resolution, shall be charged the cost for each parameter according to the following:

	Proposed					
	Effective 7/1/14	Effective 7/1/15	Effective 7/1/16	Effective 7/1/17		
Non-Residential						
Volume of wastewater discharged in accordance with the rules and regulations of the Wastewater Enterprise. Per 100 cubic feet	\$6.15	\$6.45	\$6.90	\$7.66		
COD per lb.	\$0.44	\$0.46	\$0.49	\$0.55		
SS per lb.	\$0.83	\$0.87	\$0.93	\$1.03		
O/G per lb.	\$0.87	\$0.91	\$0.97	\$1.08		

Those customers whose parameter loadings are not based on periodic sampling shall be charged on the basis of standard parameter loadings established by the General Manager for each SIC code in accordance with applicable state and federal laws and regulations.

Water and Wastewater Capacity Charges

WATER CAPACITY CHARGE

Any customer requesting a new connection to the water distribution system or requiring additional capacity as a result of any addition, improvement, modification or change in use of an existing connection as determined solely by the General Manager shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge is site specific and may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Water System. Effective July 1, 2014, the capacity charge shall be set as it is presented below. Thereafter, the capacity charge shall be adjusted on July 1st of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.

Meter Size	PROPOSED CHARGES FYE 2015
5/8 in	\$1,239
3/4 in	\$1,859
1 in	\$3,100
1-1/2 in	\$6,197
2 in	\$9,917
3 in	\$18,594
4 in	\$30,990
6 in	\$61,983
8 in	\$99,172
10 in	\$142,485
12 in	\$266,385
16 in	\$464,625

WASTEWATER CAPACITY CHARGE

Any customer requesting a new connection to the sewerage system or requiring additional collection or treatment capacity as a result of any addition, improvement, modification or change in use of an existing connection as determined solely by the General Manager shall pay a capacity charge for the new or additional capacity required to serve the customer. The capacity charge is site specific and may not be sold, traded or conveyed in a manner to another site or customer. The capacity charge does not convey or imply ownership in or of any facilities of the Wastewater System. Effective July 1, 2014, the capacity charge shall be set as it is presented below. Thereafter, the capacity charge shall be adjusted on July 1st of each subsequent year by the annual change in the 20 City Average Construction Cost Index (CCI) published by ENR Magazine.

Meter Size	SIC 2	SIC 3	SIC 4	SIC 5	SIC 6	SIC 7	SIC 8	SIC 9	SIC 10	SIC 11
5/8 in	\$3,337	\$4,078	\$4,218	\$4,066	\$3,630	\$4,752	\$4,974	\$5,221	\$4,934	\$10,610
3/4 in	5,006	6,117	6,327	6,099	5,445	7,128	7,461	7,832	7,401	15,915
1 in	8,343	10,195	10,545	10,165	9,075	11,880	12,435	13,053	12,335	26,525
1-1/2 in	16,685	20,390	21,090	20,330	18,150	23,760	24,870	26,105	24,670	53,050
2 in	26,696	32,624	33,744	32,528	29,040	38,016	39,792	41,768	39,472	84,880
3 in	50,055	61,170	63,270	60,990	54,450	71,280	74,610	78,315	74,010	159,150
4 in	83,425	101,950	105,450	101,650	90,750	118,800	124,350	130,525	123,350	265,250
6 in	166,850	203,900	210,900	203,300	181,500	237,600	248,700	261,050	246,700	530,500
8 in	266,960	326,240	337,440	325,280	290,400	380,160	397,920	417,680	394,720	848,800
10 in	383,755	468,970	485,070	467,590	417,450	546,480	572,010	600,415	567,410	1,220,150
12 in	717,455	876,770	906,870	874,190	780,450	1,021,680	1,069,410	1,122,515	1,060,810	2,281,150
16 in	1,251,375	1,529,250	1,581,750	1,524,750	1,361,250	1,782,000	1,865,250	1,957,875	1,850,250	3,978,750