

# **10-Year Financial Plan Update & Projected Revenue Requirement**

**FY 2016-17 through FY 2025-26  
February 9, 2016**



# Key Assumptions – Water

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## Revenue decrease due to reduced water sales projections

- Retail – 58.9 MGD FY 2015-16 onward
  - ◆ Compares to 64.1 MGD projection FY 2016-2025 10-year plan
  - ◆ Compares to 67.3 MGD projection FY 2015-2024 10-year plan
- Wholesale – 115 MGD FY 2015-16 and 110 MGD FY 2016-17 onward
  - ◆ Compares to 130 MGD projection FY 2016-2025 10-year plan
  - ◆ Compares to 143 MGD projection FY 2015-2024 10-year plan

## Operating Expense

- Incorporates \$100M savings from 5% O&M expense reductions
  - ◆ Adds back COLA Increases: \$1M (0.6%) FY 2016-17, \$3M (1.9%) FY 2017-18 onward
  - ◆ Adds back new proposals: \$4M (1.7%) FY 2016-17, \$5M (2.1%) FY 2017-18 onward

## 10-Year Capital Plans & Debt Service

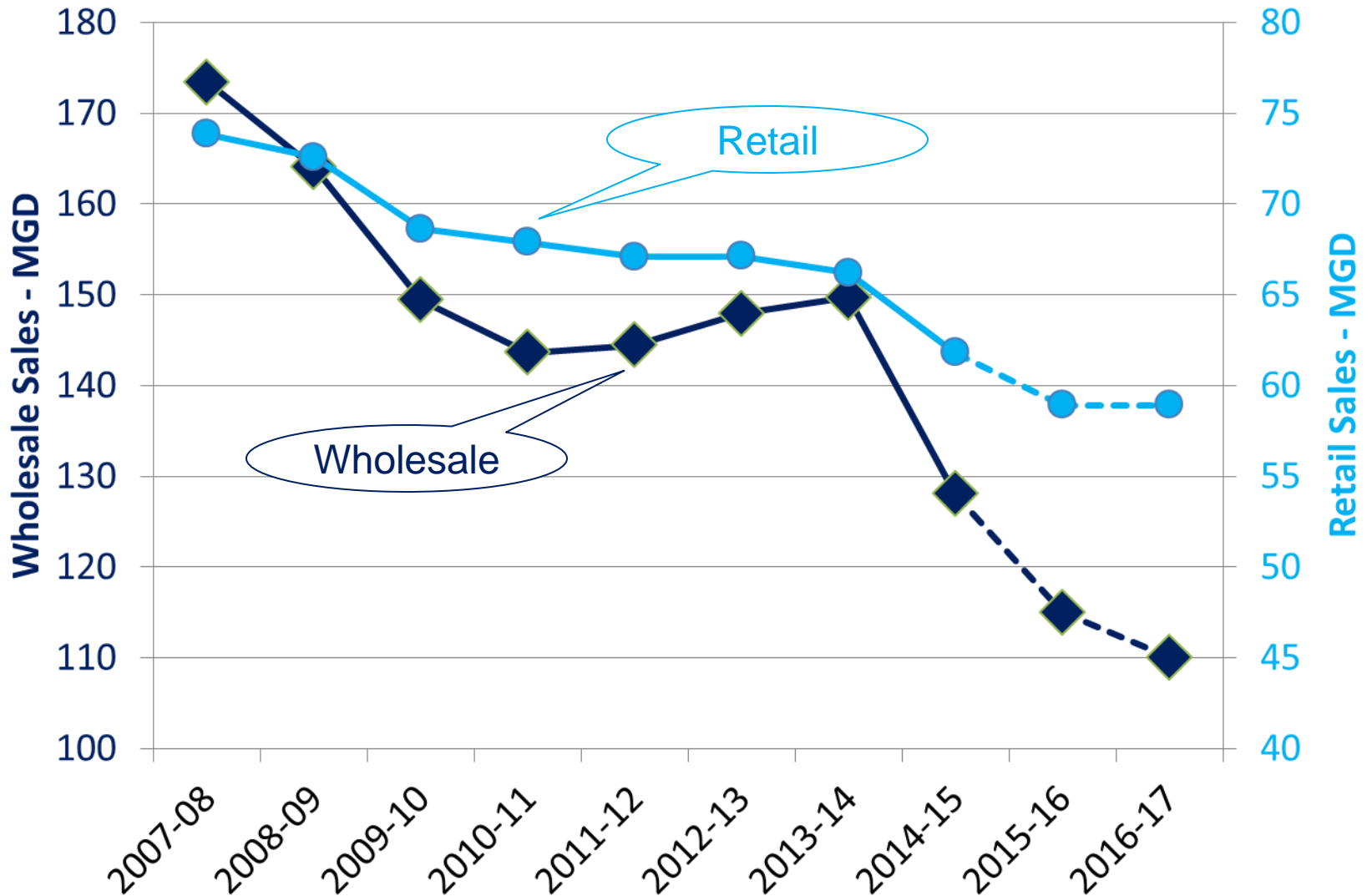
- Water 10-Year Capital Plan \$79M higher than prior plan, Hetchy Water up \$4M
- Savings from bond refunding (2006A, 2009A)

## Revenue Funded Capital

- Non-WSIP CIP 100% revenue funded by FY 2025-26

# Water Sales

## Historical & Projected





# Water Enterprise

Description (\$mm)	FYE 2016 Forecast	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026
<b>Beginning Operating Fund Balance</b>	166.7	143.5	119.2	113.8	101.5	83.6	97.6	115.5	115.5	113.8	120.8
<b>Sources</b>											
Retail											
Retail Sales - Base Rates	186.9	209.5	230.4	246.5	273.7	303.8	337.2	360.8	382.4	405.4	429.7
Retail Sales - Rate Increases	22.6	20.9	16.1	27.1	30.1	33.4	23.6	21.6	22.9	24.3	17.2
Retail Subtotal	209.5	230.4	246.5	273.7	303.8	337.2	360.8	382.4	405.4	429.7	446.9
Wholesale											
Wholesale Sales - Operating Costs	82.7	93.4	96.6	99.9	103.2	115.7	117.7	118.1	121.0	124.0	128.0
Wholesale Sales - Capital & Debt	128.9	125.1	133.8	151.2	171.4	183.0	190.9	201.5	209.8	217.1	229.7
Wholesale Subtotal	211.6	218.4	230.4	251.1	274.5	298.6	308.5	319.6	330.8	341.1	357.7
Other											
Interest Income	1.6	1.8	1.8	3.4	3.0	2.5	2.9	3.5	3.5	3.4	3.6
Other Income	27.8	26.8	27.6	28.4	29.3	30.2	31.1	32.0	33.0	33.9	35.0
<b>Total Sources</b>	450.5	477.4	506.4	556.6	610.6	668.5	703.3	737.5	772.6	808.2	843.2
<b>Uses</b>											
Operations & Maintenance	198.2	189.3	192.8	198.5	204.5	210.6	217.0	223.5	230.2	237.1	244.2
Hetchy Transfer	36.6	34.6	32.6	33.6	34.6	35.6	36.7	37.8	38.9	40.1	41.3
Debt Service	197.5	228.6	232.3	258.3	313.0	346.8	361.4	400.8	424.6	429.4	442.6
Retail Share - Rev Funded Capital/Prog	24.7	29.9	29.9	39.0	37.5	48.6	57.6	62.8	67.8	75.3	83.9
Wholesale Share - Rev Funded Capital/Prog	16.6	19.3	24.2	39.5	39.0	12.8	12.7	12.7	12.9	19.2	25.2
<b>Total Uses</b>	473.7	501.8	511.7	568.9	628.6	654.5	685.3	737.5	774.3	801.1	837.2
<b>Net Revenues</b>	(23.2)	(24.3)	(5.3)	(12.3)	(18.0)	14.0	18.0	(0.1)	(1.7)	7.1	6.0
<b>Ending Fund Balance</b>	143.5	119.2	113.8	101.5	83.6	97.6	115.5	115.5	113.8	120.8	126.8
<b>Requirement - Retail</b>	12%	10%	7%	11%	11%	11%	7%	6%	6%	6%	4%
<b>Requirement - Wholesale</b>	28%	7%	5%	9%	10%	9%	3%	4%	4%	3%	5%
<b>Fund Balance as % of Revenue</b>	32%	25%	22%	18%	15%	15%	16%	16%	15%	15%	15%
<b>Fund Balance as % of Expense</b>	22%	24%	22%	18%	13%	15%	17%	16%	15%	15%	15%
<b>Fund Balance as % of Operating Expense</b>	72%	63%	59%	51%	41%	46%	53%	52%	49%	51%	52%
<b>Debt Service Coverage (Indenture)</b>	1.86	1.57	1.59	1.54	1.37	1.43	1.50	1.42	1.40	1.47	1.50
<b>Debt Service Coverage (Current)</b>	1.15	1.05	1.10	1.15	1.11	1.15	1.18	1.13	1.13	1.19	1.21
<b>Water Sales - Retail (MGD)</b>	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
<b>Water Sales - Wholesale (MGD)</b>	115.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
<b>Water Sales - SFR Monthly Average (Ccf)</b>	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0



# Key Assumptions – Wastewater

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## Revenue decrease due to reduced water sales projections

- Retail – 48.5 MGD FY 2015-16 onward
  - ◆ Compares to 52.8 MGD projection FY 2016-2025 10-year plan
  - ◆ Compares to 55.4 MGD projection FY 2015-2024 10-year plan

## Operating Expense

- Incorporates \$90M savings from 5% O&M expense reductions
  - ◆ Adds back COLA Increases: \$2M (0.7%) FY 2016-17, \$2M (2.1%) FY 2017-18 onward
  - ◆ Adds back new proposals: \$1M (0.4%) FY 2016-17, \$1M (0.6%) FY 2017-18 onward

## 10-Year Capital Plan & Debt Service

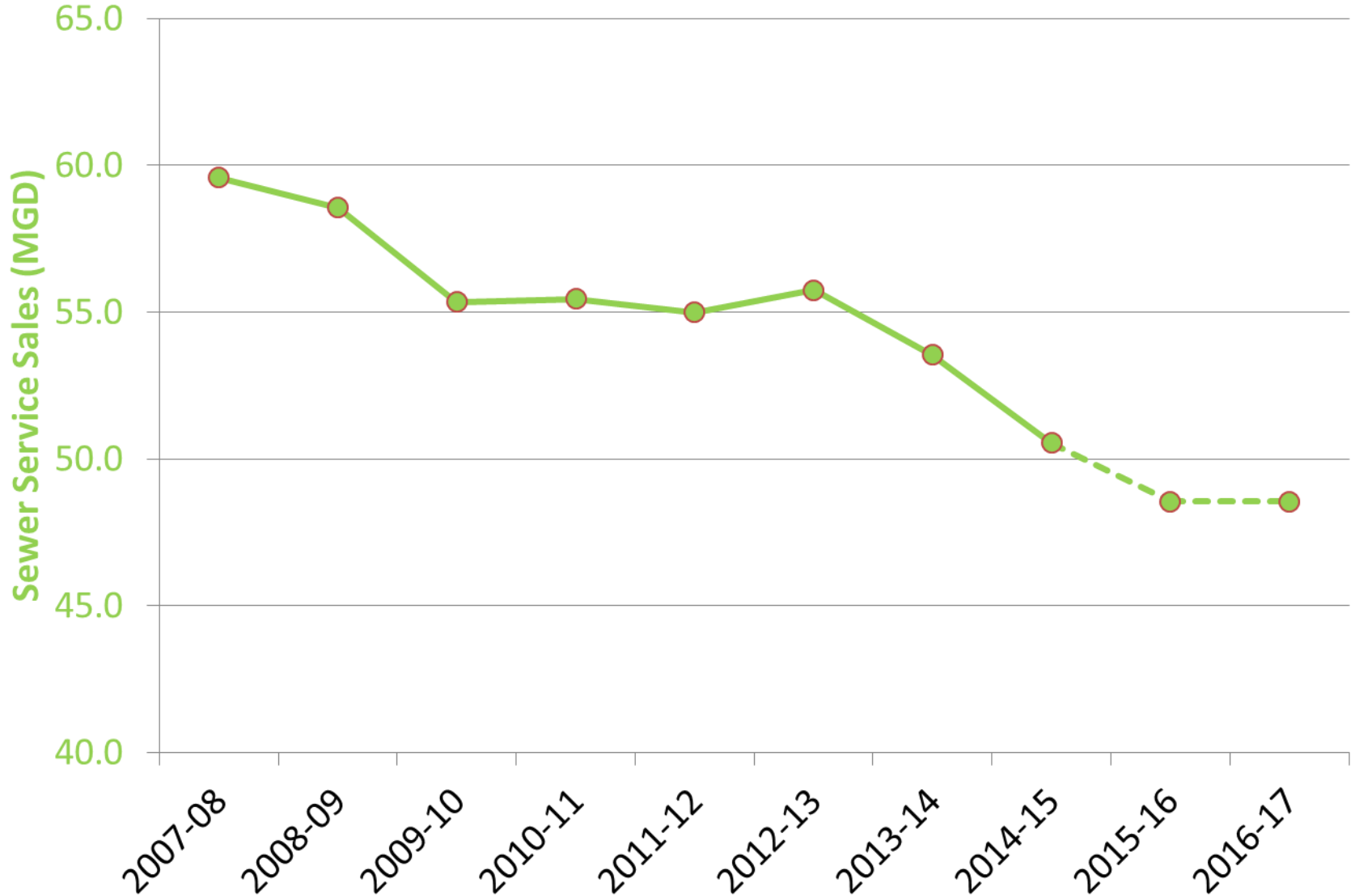
- Wastewater 10-Year Capital Plan \$206M lower than prior plan
- Assumes \$1.9B SRF funding

## Revenue Funded Capital

- Non-SSIP CIP 100% revenue funded by FY 2021-22

# Wastewater Sales

## Historical & Projected





# Wastewater Enterprise

Description (\$mm)	FYE 2016 Forecast	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026
<b>Beginning Operating Fund Balance</b>	121.2	119.6	136.3	152.5	162.6	167.0	163.3	154.9	169.1	133.9	114.8
<b>Sources</b>											
Sewer Service Sales -Base Rates	238.1	250.0	267.5	296.9	338.5	385.9	439.9	492.7	542.0	596.2	643.9
Sewer Service Sales - Rate Increases	11.9	17.5	29.4	41.6	47.4	54.0	52.8	49.3	54.2	47.7	38.6
Interest Income on Fund Balances	0.8	1.3	1.5	1.6	1.8	1.9	2.0	2.2	2.1	2.2	2.2
Other Miscellaneous Income	4.6	3.4	3.5	3.5	3.6	3.6	3.7	3.7	3.8	3.8	3.9
<b>Total Sources (less Bond Interest Subsidy)</b>	<b>255.4</b>	<b>272.3</b>	<b>301.9</b>	<b>343.7</b>	<b>391.2</b>	<b>445.4</b>	<b>498.4</b>	<b>547.9</b>	<b>602.1</b>	<b>649.9</b>	<b>688.6</b>
<b>Uses</b>											
Operations & Maintenance	158.0	157.6	161.6	166.5	171.5	176.6	181.9	187.4	193.0	198.8	204.8
Debt Service (net of Bond Interest Subsidy)	59.5	48.8	72.7	112.8	134.9	164.0	217.6	288.8	326.4	346.6	365.6
Projects - Revenue Funded	48.3	49.2	51.3	54.3	80.4	108.5	107.2	57.5	117.9	123.6	129.5
<b>Total Uses</b>	<b>265.8</b>	<b>255.6</b>	<b>285.6</b>	<b>333.6</b>	<b>386.8</b>	<b>449.2</b>	<b>506.8</b>	<b>533.6</b>	<b>637.3</b>	<b>669.0</b>	<b>699.9</b>
<b>Net Revenues</b>	<b>(10.4)</b>	16.7	16.3	10.0	4.5	<b>(3.7)</b>	<b>(8.4)</b>	14.3	<b>(35.2)</b>	<b>(19.1)</b>	<b>(11.3)</b>
<b>Ending Fund Balance</b>	119.6	136.3	152.5	162.6	167.0	163.3	154.9	169.1	133.9	114.8	103.5
<b>Revenue Requirement Impact</b>	<b>5.0%</b>	<b>7.0%</b>	<b>11.0%</b>	<b>14.0%</b>	<b>14.0%</b>	<b>14.0%</b>	<b>12.0%</b>	<b>10.0%</b>	<b>10.0%</b>	<b>8.0%</b>	<b>6.0%</b>
<b>Fund Balance as % of Revenue</b>	47%	50%	51%	47%	43%	37%	31%	31%	22%	18%	15%
<b>Fund Balance as % of Expense</b>	40%	53%	53%	49%	43%	36%	31%	32%	21%	17%	15%
<b>Fund Balance as % of Operating Expense</b>	76%	86%	94%	98%	97%	92%	85%	90%	69%	58%	51%
<b>Debt Service Coverage (Indenture)</b>	3.72	4.72	3.75	2.89	2.80	2.63	2.18	1.77	1.76	1.67	1.62
<b>Debt Service Coverage (Current)</b>	1.51	2.22	1.84	1.51	1.58	1.60	1.42	1.23	1.23	1.28	1.31

Already approved rates.



# Combined Water & Wastewater Retail Rate Changes

			Financial Projection					
Fiscal Year	FY2014-15 Combined	FY2015-16 Combined	Water Nominal	Sewer Nominal	FY2016-17 Combined	Change vs prior year	Change vs 2 yrs ago	
Actual	2009-10		15.0%	7.0%	9.7%			
	2010-11		15.0%	7.0%	9.7%			
	2011-12		12.5%	5.0%	7.5%			
	2012-13		12.5%	5.0%	7.5%			
	2013-14		6.5%	5.0%	5.5%			
	2014-15		12.0%	5.0%	8.0%			
	2015-16		12.0%	5.0%	8.1%			
	2016-17		10.0%	7.0%	8.4%			
2017-18		7.0%	11.0%	9.1%				
Projected	2018-19	9.1%	12.2%	11.0%	14.0%	12.7%	1%	4%
	2019-20	9.7%	12.2%	11.0%	14.0%	12.7%	1%	3%
	2020-21	9.8%	11.8%	11.0%	14.0%	12.7%	1%	3%
	2021-22	9.0%	10.8%	7.0%	12.0%	9.8%	-1%	1%
	2022-23	8.7%	8.2%	6.0%	10.0%	8.3%	0%	0%
	2023-24	8.4%	7.9%	6.0%	10.0%	8.4%	1%	0%
	2024-25	4.2%	3.6%	6.0%	8.0%	7.2%	4%	3%
	2025-26	4.3%	4.3%	4.0%	6.0%	5.2%	1%	1%
	2026-27	3.5%	3.9%	2.0%	6.0%	4.4%	1%	1%
	2027-28	3.6%	3.9%	2.0%	5.0%	3.8%	0%	0%
	2028-29	2.9%	3.3%	2.0%	5.0%	3.9%	1%	1%
	2029-30	3.0%	3.3%	2.0%	4.0%	3.3%	0%	0%
	2030-31	3.0%	3.3%	2.0%	4.0%	3.3%	0%	0%
	2031-32	3.0%	3.3%	2.0%	4.0%	3.3%	0%	0%
	2032-33	3.0%	2.7%	2.0%	4.0%	3.3%	1%	0%
	2033-34	2.0%	2.7%	2.0%	4.0%	3.3%	1%	1%
	2034-35	2.0%	2.0%	2.0%	4.0%	3.3%	1%	1%
	2035-36	2.0%	2.0%	2.0%	4.0%	3.3%	1%	1%



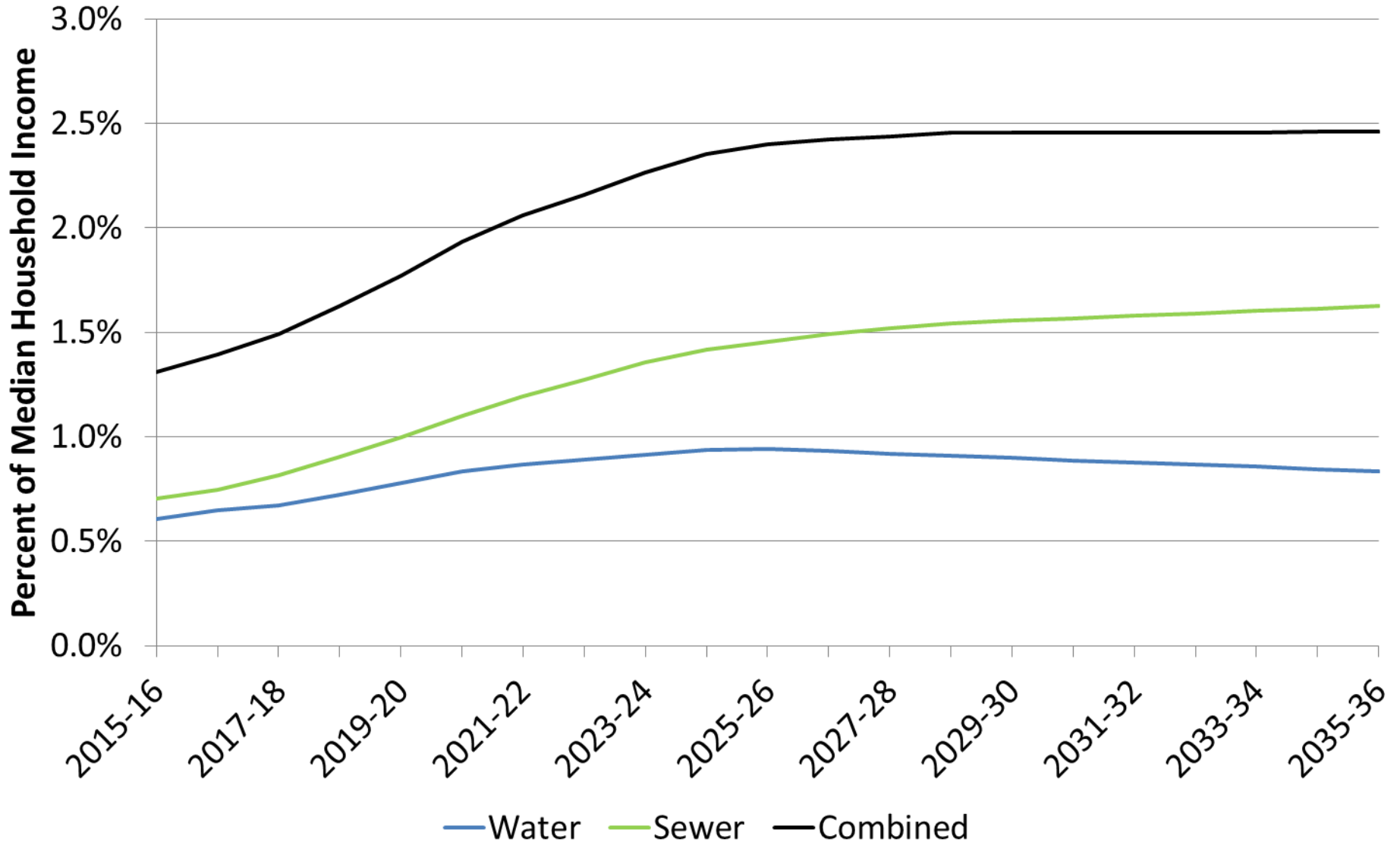


# Combined Water & Wastewater Average Monthly Bill

			Financial Projection				
Fiscal Year	FY2014-15 Combined	FY2015-16 Combined	Water	Sewer	FY2016-17 Combined	Change vs prior year	Change vs 2 yrs ago
Actual	2009-10		\$24	\$38	\$62		
	2010-11		\$28	\$43	\$71		
	2011-12		\$31	\$44	\$76		
	2012-13		\$35	\$47	\$82		
	2013-14		\$38	\$49	\$86		
	2014-15		\$37	\$45	\$82		
	2015-16		\$40	\$46	\$86		
	2016-17		\$44	\$50	\$94		
	2017-18		\$47	\$57	\$104		
Projected	2018-19	\$130	\$52	\$65	\$117	-\$8	-\$14
	2019-20	\$143	\$141	\$58	\$74	-\$9	-\$11
	2020-21	\$157	\$157	\$64	\$84	-\$9	-\$9
	2021-22	\$171	\$174	\$68	\$94	-\$11	-\$8
	2022-23	\$186	\$188	\$73	\$104	-\$12	-\$10
	2023-24	\$202	\$203	\$77	\$114	-\$12	-\$11
	2024-25	\$210	\$211	\$82	\$123	-\$6	-\$5
	2025-26	\$219	\$220	\$85	\$131	-\$4	-\$4
	2026-27	\$227	\$228	\$87	\$139	-\$3	-\$2
	2027-28	\$235	\$237	\$88	\$146	-\$4	-\$1
	2028-29	\$242	\$245	\$90	\$153	-\$2	\$1
	2029-30	\$249	\$253	\$92	\$159	-\$3	\$2
	2030-31	\$257	\$262	\$94	\$165	-\$3	\$2
	2031-32	\$264	\$271	\$96	\$172	-\$3	\$3
	2032-33	\$272	\$278	\$97	\$179	-\$1	\$4
	2033-34	\$278	\$285	\$99	\$186	\$0	\$8
	2034-35	\$283	\$291	\$101	\$193	\$4	\$11
	2035-36	\$289	\$297	\$103	\$201	\$8	\$16



# Utility Affordability: San Francisco Retail Cost as a Percent of Median Household Income



Based on 2015 median household income of \$75,910 inflated 3% per year, with 5 Ccf monthly water consumption from FYE 2016 forward.



# Key Assumptions – Hetch Hetchy

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## Revenue

- Power Cost-of-Service study underway; Power rates scheduled for Commission approval Spring 2016
- Annual 0.5¢/kWh increase in General Fund power rate
- Enterprise rates inflated 3% annually

## Operating Expenses

- Incorporates \$90M savings from 5% O&M expense reductions
  - ◆ Adds back COLA Increases: \$1M (0.4%) FY 2016-17, \$2M (1.3%) FY 2017-18 onward
  - ◆ Adds back new proposals: \$0.3M (0.2%) FY 2016-17, \$0.3M (0.2%) FY 2017-18 onward

## 10-Year Capital Plan & Debt Service

- Hetch Hetchy 10-Year Capital Plan \$143M lower than prior plan
  - ◆ Power \$147M lower than prior plan, Water \$4M higher than prior plan

## CCA

- Additional \$4M appropriated, repaid FY 2020-21



# Hetch Hetchy Water & Power

Description (\$mm)	FYE 2016 Forecast	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026
<b>Beginning Operating Fund Balance</b>	33.4	54.4	38.5	29.9	31.4	33.9	40.1	44.8	36.0	38.6	39.5
<b>CCA Reserves &amp; Repayment</b>	(4.0)	0.8	2.0	2.0	2.0	1.3					
<b>Sources</b>											
Power Sales - GF Departments	18.3	20.2	21.9	22.7	24.3	26.0	27.6	29.2	30.9	32.5	34.1
Power Sales - Enterprise Departments	68.1	68.4	71.4	74.0	76.5	79.4	82.0	84.9	87.8	90.8	93.9
Power Sales - Retail/Direct (SFUSD, City College)	19.1	19.6	20.8	23.9	24.9	26.0	27.1	28.3	29.4	30.6	31.8
Power Sales - Redevelopment/TI	3.6	4.0	5.0	6.0	7.1	9.1	11.4	13.5	16.1	19.9	23.6
Power Sales - Districts & WSPP	24.3	20.8	21.7	22.8	23.0	23.2	23.6	23.9	24.1	24.0	24.4
Water Sales - Upcountry	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3
Water Transfer In	36.6	34.6	32.6	33.6	34.6	35.7	36.8	37.9	39.1	40.3	41.5
Natural Gas & Steam	10.1	11.3	14.3	14.7	15.1	15.6	16.1	16.5	17.0	17.5	18.1
Interest Income	1.1	1.2	1.3	1.1	1.2	1.3	1.4	1.3	1.2	1.3	1.4
Other Misc Income	9.2	6.1	6.5	7.0	7.2	4.3	2.3	2.4	2.5	2.6	2.7
<b>Total Sources</b>	192.3	188.0	197.4	207.8	216.1	222.7	230.4	240.2	250.2	261.8	273.7
<b>Uses</b>											
Operations & Maintenance	144.0	148.3	154.3	160.8	167.0	173.7	179.7	185.7	192.3	199.8	208.4
Water Programmatic Projects	0.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Power Programmatic Projects	16.2	12.5	12.7	12.9	13.1	13.3	11.5	11.7	11.9	12.2	12.4
Debt Service - Power Only	2.0	2.1	4.5	10.6	11.5	13.6	15.7	40.6	40.2	40.2	40.5
Subtotal	162.8	164.0	172.6	185.4	192.7	201.7	208.0	239.2	245.6	253.4	262.5
<b>Net Revenues Before Revenue-Funded Capital</b>	29.5	24.1	24.8	22.3	23.5	21.0	22.4	1.0	4.6	8.4	11.2
Net Power - Revenue Funded	19.1	40.7	35.4	22.8	23.0	16.1	17.7	9.8	2.1	7.6	7.7
Net Hetchy Water - Revenue Funded	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Uses, Net of Debt Proceeds</b>	181.9	204.7	208.0	208.2	215.7	217.8	225.7	249.0	247.7	260.9	270.2
<b>Net Revenues After Capital</b>	10.4	(16.7)	(10.6)	(0.5)	0.4	4.9	4.7	(8.8)	2.6	0.9	3.5
<b>Ending Fund Balance</b>	54.4	38.5	29.9	31.4	33.9	40.1	44.8	36.0	38.6	39.5	43.0
Fund Balance as % of Revenue	28%	21%	15%	15%	16%	18%	19%	15%	15%	15%	16%
Fund Balance as % of Operating Expenses	39%	27%	20%	20%	21%	24%	26%	20%	20%	20%	21%
Fund Balance as % of Total Expenses	15%	19%	15%	15%	16%	19%	20%	15%	16%	15%	16%
Debt Service Coverage (Indenture)	37.4	26.3	10.2	4.7	4.7	4.4	4.3	2.3	2.2	2.3	2.4
Debt Service Coverage (Current)	10.4	7.8	3.7	2.0	2.0	1.6	1.6	1.2	1.3	1.4	1.4
Assumed Rate Increase to General Fund Rates (cent/kWh per year)	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50



# Hetch Hetchy Water & Power

## Assumed Average Power Rate (\$/kWh)

Assumed Average Power Rate (\$/kWh)	FYE 2016 Forecast	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026
<b>Key Subsidized Rates</b>											
Streetlights	0.0300	0.0350	0.0400	0.0450	0.0500	0.0550	0.0600	0.0650	0.0700	0.0750	0.0800
City Hall	0.0300	0.0350	0.0400	0.0450	0.0500	0.0550	0.0600	0.0650	0.0700	0.0750	0.0800
GF Departments	0.0675	0.0725	0.0775	0.0825	0.0875	0.0925	0.0975	0.1025	0.1075	0.1125	0.1175
Moscone Center	0.0870	0.0920	0.0970	0.1020	0.1070	0.1120	0.1170	0.1220	0.1270	0.1320	0.1370
<b>Other Rates</b>											
Enterprise Departments (Airport)	0.1286	0.1309	0.1360	0.1401	0.1443	0.1486	0.1530	0.1576	0.1624	0.1672	0.1722
Enterprise Departments (All Other)	0.1518	0.1577	0.1642	0.1691	0.1742	0.1794	0.1848	0.1903	0.1960	0.2019	0.2080
Modesto/Turlock Irrigation Districts	0.0435	0.0349	0.0367	0.0384	0.0389	0.0395	0.0401	0.0407	0.0412	0.0418	0.0424
Western Systems Power Pool	0.0361	0.0272	0.0277	0.0279	0.0288	0.0297	0.0306	0.0315	0.0324	0.0334	0.0344
<b>Retail-Redevelopment-Residential</b>											
Tier 1	0.1171	0.1206	0.1242	0.1279	0.1317	0.1357	0.1398	0.1440	0.1483	0.1527	0.1573
Tier 2	0.1331	0.1371	0.1412	0.1454	0.1498	0.1543	0.1589	0.1636	0.1686	0.1736	0.1788
Tier 3	0.2724	0.2806	0.2890	0.2976	0.3066	0.3158	0.3252	0.3350	0.3450	0.3554	0.3661
<b>Retail-Redevelopment-Commercial</b>											
Winter	0.1436	0.1479	0.1523	0.1569	0.1616	0.1665	0.1715	0.1766	0.1819	0.1874	0.1930
Summer	0.2007	0.2067	0.2129	0.2193	0.2258	0.2326	0.2396	0.2468	0.2542	0.2618	0.2697