



To: City Council, City of Santa Barbara
Subject: Fiscal Year 2016/17 Water Rate Model Analysis
Date: 7.27.2016
From: Douglas Dove, President; Michael DeGroot, Financial Analyst

MEMORANDUM

Background

Bartle Wells Associates (BWA) has been retained by the City of Santa Barbara to update the City's Fiscal Year (FY) 2016/17 water rate model. The initial water rate study was conducted by Raftelis Financial Consultants (RFC) and was completed in August 2013.

Water rates for FY 2014/15 and FY 2015/16 were updated by RFC in memos dated May 2014 and March 2015 respectively. The memos included funding for costs related to drought conditions. The City independently updated the RFC water rate model for FY 2016/17. The proposed rates were projected to be implemented July 1, 2016 and Proposition 218 notifications were mailed to customers, however the public hearing was continued to August 9th, 2016 due to a potential error discovered in the rate model and the magnitude of the increase in the proposed water rates.

The purpose of this analysis is to evaluate FY 2016/17 water rates for proposed adoption. Financial information herein for FY 2017/18 and 2018/19 should be considered preliminary and is subject to change given the current severe drought which has caused uncertain conditions in water supply and demand. The City will continue to evaluate the drought impacts and financial plan prior to adoption of Fiscal Year 2017/18 and Fiscal Year 2018/19 water rates.

Key objectives of BWA's analysis include: (1) an independent update of the FY 2016/17 water rate model based on a late rate implementation, (2) a detailed cost of service analysis to ensure compliance of City water rates with California Proposition 218.

Current and Proposed Water Rates

Table 1 shows a summary of current (FY 2015/16) water rates and a comparison of three rate schedules for FY 2016/17 water rates. The proposed FY 2016/17 rate schedules are summarized below:

- 1. Noticed rates:** These rates were developed by the City and mailed to customers. A public hearing for City Council to consider the proposed increases was held on June 14, 2016 at 2:00 pm. The rates would have been effective on July 1, 2016, however, the public hearing was continued to August 9th at 2:00 pm pending BWA's independent analysis.
- 2. BWA proposed rates:** BWA proposed rates are developed in detail in this memo and are based on an update of the City's water rate model. The proposed rates factor in lost revenue from a late rate adoption projected on August 9th 2016.

3. Notice revised rates: BWA recommends that the City charge the notice revised rates to customers. BWA's analysis resulted in rates which are higher for some customers and tier levels, and lower for others. The notice revised rates are held to the maximum of BWA's proposed rate and the noticed rate. As a result, the rates do not exceed BWA's cost of service, however, certain rates are lower than the BWA's cost of service. Given the City's drought emergency and potential consequences resulting from further delay of necessary rate increases, BWA recommends the City charge the notice revised rates. The rate difference can be temporarily funded by water enterprise interest earnings accumulated from FY 2011 to FY 2015. Rates are recommended to be re-evaluated and adjusted again for FY 2017/18.

Table 1
City of Santa Barbara
Water Rates

| | Current | Noticed Rates | | BWA Proposed | | Notice Revised Rates | | |
|--|--------------------|---------------|------------|--------------|------------|----------------------|------------|-----|
| | FY 2015/16 | FY 2016/17 | % Increase | FY 2016/17 | % Increase | August 2016 | % Increase | |
| Monthly Water Meter Service Charge | | | | | | | | |
| Meter Size | | | | | | | | |
| 5/8" | \$23.49 | \$24.50 | 4% | \$26.25 | 12% | \$24.50 | 4% | |
| 3/4" | \$34.19 | \$35.60 | 4% | \$38.23 | 12% | \$35.60 | 4% | |
| 1" | \$55.61 | \$57.80 | 4% | \$62.21 | 12% | \$57.80 | 4% | |
| 1 1/2" | \$109.14 | \$113.29 | 4% | \$122.14 | 12% | \$113.29 | 4% | |
| 2" | \$173.38 | \$179.89 | 4% | \$194.06 | 12% | \$179.89 | 4% | |
| 3" | \$376.82 | \$390.77 | 4% | \$421.80 | 12% | \$390.77 | 4% | |
| 4" | \$676.61 | \$701.54 | 4% | \$757.43 | 12% | \$701.54 | 4% | |
| 6" | \$1,393.98 | \$1,445.18 | 4% | \$1,560.53 | 12% | \$1,445.18 | 4% | |
| 8" | \$2,571.74 | \$2,666.07 | 4% | \$2,879.06 | 12% | \$2,666.07 | 4% | |
| 10" | \$4,070.71 | \$4,219.93 | 4% | \$4,557.19 | 12% | \$4,219.93 | 4% | |
| Monthly Fire Line Service Charge | | | | | | | | |
| Meter Size | | | | | | | | |
| 1" | \$2.67 | \$2.76 | 3% | \$2.77 | 4% | \$2.76 | 3% | |
| 1 1/2" | \$3.39 | \$3.64 | 7% | \$3.73 | 10% | \$3.64 | 7% | |
| 2" | \$4.67 | \$5.16 | 10% | \$5.38 | 15% | \$5.16 | 10% | |
| 4" | \$17.31 | \$19.99 | 15% | \$21.49 | 24% | \$19.99 | 15% | |
| 6" | \$46.04 | \$53.67 | 17% | \$58.10 | 26% | \$53.67 | 17% | |
| 8" | \$95.59 | \$111.77 | 17% | \$121.24 | 27% | \$111.77 | 17% | |
| 10" | \$170.12 | \$199.17 | 17% | \$216.21 | 27% | \$199.17 | 17% | |
| 12" | \$273.42 | \$320.29 | 17% | \$347.84 | 27% | \$320.29 | 17% | |
| Water Service Rates | | | | | | | | |
| SFR | | | | | | | | |
| Tier 1 | First 4 hcf | \$4.20 | \$4.89 | 16% | \$4.56 | 8% | \$4.56 | 8% |
| Tier 2 | Next 12 hcf | \$8.51 | \$12.97 | 52% | \$15.17 | 78% | \$12.97 | 52% |
| Tier 3 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| MFR | | | | | | | | |
| Tier 1 | First 4 hcf | \$4.20 | \$4.89 | 16% | \$4.56 | 8% | \$4.56 | 8% |
| Tier 2 | Next 4 hcf | \$8.51 | \$12.97 | 52% | \$15.17 | 78% | \$12.97 | 52% |
| Tier 3 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| Commercial/Industrial | | | | | | | | |
| Tier 1 | 100% of allocation | \$6.53 | \$7.88 | 21% | \$6.28 | -4% | \$6.28 | -4% |
| Tier 2 | All other hcf | \$15.24 | \$23.94 | 57% | \$24.33 | 60% | \$23.94 | 57% |
| Irrigation - Residential | | | | | | | | |
| Tier 1 | 100% of allocation | \$8.51 | \$12.97 | 52% | \$15.17 | 78% | \$12.97 | 52% |
| Tier 2 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| Irrigation - Commercial | | | | | | | | |
| Tier 1 | 100% of allocation | \$8.51 | \$12.97 | 52% | \$15.17 | 78% | \$12.97 | 52% |
| Tier 2 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| Irrigation - Recreation/Parks/Schools | | | | | | | | |
| Tier 1 | 100% of allocation | \$3.70 | \$3.77 | 2% | \$4.63 | 25% | \$3.77 | 2% |
| Tier 2 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| Irrigation - Agriculture | | | | | | | | |
| Tier 1 | 100% of allocation | \$2.43 | \$3.42 | 41% | \$3.50 | 44% | \$3.42 | 41% |
| Tier 2 | All other hcf | \$18.59 | \$24.27 | 31% | \$24.32 | 31% | \$24.27 | 31% |
| Recycled Water | 100% of allocation | \$2.96 | \$3.02 | 2% | \$3.15 | 7% | \$3.02 | 2% |
| Outside City Limits (x Inside City rates) | | 130% | 130% | | 100% | | 100% | |

Water Enterprise Reserves

Table 2 shows the reserve fund balances for the water enterprise. The City’s existing reserve policy establishes three reserve funds:

- Disaster reserve equal to at least 15% of its annual operating budget for the following fiscal year set aside for the purpose of responding to natural disasters and emergencies.
- Contingency reserve equal to at least 10% of its annual operating budget for the following fiscal year is set aside for the purpose of funding unique one-time costs and to permit budget adjustments during periods of reductions.
- Capital reserve fund, to be used to fund ongoing capital expenses. For the capital reserve fund, the City has established a fund target equal to the minimum of either the prior 3-year average CIP, the prior 5-year average CIP, OR 5% of the City’s water net asset values, whichever is least.

Based on the policies described above, the FY 2015/16 reserve target is approximately \$19.0 million. The actual projected FY 2016 total ending reserve balance is approximately \$23.3 million, which is about \$4.3 million above policy requirements.

Table 2
City of Santa Barbara
Water Enterprise Reserve Fund Balances

| | FY 2016 | Reserve Target * |
|--|---------------------|-------------------------|
| Total Funds @ 7/1/2015 | \$17,510,136 | \$18,956,145 |
| Projected Funds @ 6/30/2016¹ | \$23,306,105 | |

*** City Target Reserve Policy**

| | |
|--|--------------------|
| Disaster Reserve (15% of Operating Budget) | \$6,777,559 |
| Contingency (10% of Operating Budget) | \$4,518,373 |
| Capital | <u>\$7,660,213</u> |
| | \$18,956,145 |

¹ Includes Rate Stabilization Fund balance of \$5,000,000

Projected Customer Growth and Water Use

Table 3 shows customer base projections. The water enterprise currently serves approximately 27,600 connections, including about 500 fire line connections. Overall growth in new connections, excluding fire line, is estimated to be approximately 0.32% per year based on demand and urban water use projections, provided by City staff.

Table 3
City of Santa Barbara
Customer Base Projections

| User Class | Projected | | | |
|-----------------------------------|-----------|----------|----------|----------|
| | FY 2016 | FY 2017 | FY 2018 | FY 2019 |
| Meters, excluding Fire Line | | | | |
| 5/8" | 19,966 | 20,029 | 20,092 | 20,156 |
| 3/4" | 1,353 | 1,357 | 1,361 | 1,365 |
| 1" | 3,914 | 3,926 | 3,938 | 3,950 |
| 1 1/2" | 789 | 793 | 797 | 801 |
| 2" | 884 | 887 | 890 | 893 |
| 3" | 35 | 35 | 35 | 35 |
| 4" | 21 | 21 | 21 | 21 |
| 6" | 16 | 16 | 16 | 16 |
| 8" | 3 | 3 | 3 | 3 |
| <u>10"</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| Total Meters, excluding Fire Line | 26,981 | 27,067 | 27,153 | 27,240 |
| % Increase | 0.32% | 0.32% | 0.32% | 0.32% |
| Fire Line | | | | |
| 1" | 0 | 0 | 0 | 0 |
| 1 1/2" | 0 | 0 | 0 | 0 |
| 2" | 174 | 174 | 174 | 174 |
| 4" | 239 | 239 | 239 | 239 |
| 6" | 83 | 83 | 83 | 83 |
| 8" | 25 | 25 | 25 | 25 |
| 10" | 2 | 2 | 2 | 2 |
| <u>12"</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| Total Fire Line | 524 | 524 | 524 | 524 |

Water Use Projections

Table 4 shows water use projections.

The City is has been experiencing an extreme multi-year drought, and is currently in a Stage Three Drought Emergency. Given continued drought and projected water shortages, the City Council amended Resolution 15-036 on April 26, 2016 establishing a 35% conservation target. The resolution was first approved in May 5, 2015 with a 25% conservation target. The decrease in water use between FY 2016 and FY 2017 is based on the assumption that in FY 2017 customers will cut back approximately 35% overall compared to FY 2014 usage. Projections assume use remains flat in FY 2018 before recovering between FY 2019 and FY 2023.

Table 4
City of Santa Barbara
Water Use Projections (hcf)

| | FY 2016 | FY 2017 | % Δ | FY 2018 | % Δ | FY 2019 | % Δ |
|---------------------------------------|------------------|------------------|-------------|------------------|-----------|------------------|-----------|
| Inside City Limits | | | | | | | |
| Single Family Residential (SFR) | 1,622,231 | 1,436,597 | -11% | 1,436,597 | 0% | 1,621,230 | 13% |
| Multi-Family Residential (MFR) | 1,026,693 | 874,927 | -15% | 874,927 | 0% | 926,830 | 6% |
| Commercial/Industrial | 874,710 | 832,912 | -5% | 832,912 | 0% | 854,280 | 3% |
| Irrigation - Residential Associated | 0 | 0 | | 0 | | 0 | |
| Irrigation - Residential | 89,765 | 60,160 | -33% | 60,160 | 0% | 77,018 | 28% |
| Irrigation - Commercial | 21,848 | 13,355 | -39% | 13,355 | 0% | 18,988 | 42% |
| Irrigation - Recreation/Parks/Schools | 54,243 | 40,664 | -25% | 40,664 | 0% | 47,463 | 17% |
| Irrigation - Agriculture | 54,052 | 39,344 | -27% | 39,344 | 0% | 43,974 | 12% |
| Recycled Water | 362,876 | 362,876 | 0% | 368,891 | 2% | 374,905 | 2% |
| TOTAL INSIDE CITY WATER USAGE | 4,106,418 | 3,660,834 | | 3,666,848 | | 3,964,689 | |
| Outside City Limits | | | | | | | |
| Single Family Residential (SFR) | 146,434 | 123,267 | -16% | 123,267 | 0% | 143,303 | 16% |
| Multi-Family Residential (MFR) | 14,031 | 9,691 | -31% | 9,691 | 0% | 10,933 | 13% |
| Commercial/Industrial | 4,756 | 4,252 | -11% | 4,252 | 0% | 3,968 | -7% |
| Irrigation - Residential Associated | 0 | 0 | | 0 | | 0 | |
| Irrigation - Residential | 3,686 | 2,535 | -31% | 2,535 | 0% | 3,007 | 19% |
| Irrigation - Commercial | 85 | 107 | 25% | 107 | 0% | 159 | 50% |
| Irrigation - Recreation/Parks/Schools | 375 | 198 | -47% | 198 | 0% | 256 | 30% |
| Irrigation - Agriculture | 11,547 | 8,611 | -25% | 8,611 | 0% | 9,443 | 10% |
| Recycled Water | 1,285 | 1,285 | 0% | 1,306 | 2% | 1,328 | 2% |
| TOTAL OUTSIDE CITY WATER USAGE | 182,199 | 149,946 | | 149,967 | | 172,397 | |
| TOTAL WATER USAGE | 4,288,617 | 3,810,780 | -11% | 3,816,816 | 0% | 4,137,086 | 8% |
| Excluding Recycled Water | 3,924,456 | 3,446,619 | | 3,446,619 | | 3,760,853 | |

Water Enterprise Expenses

Table 5 shows projected water operating and maintenance (O&M) expenses. Major ongoing expense items include: Water Resources Management, Water Supply Management, and Water Distribution. Water Drought expenses include: COMB emergency pump project expenses, purchase and conveyance of supplemental water purchases, COMB Emergency Pump Project expenses, and expenses related to outreach and conservation programs. Drought related expenses are projected to be eliminated by FY 2019, assuming the drought conditions have subsided.

Table 5
City of Santa Barbara
O&M Expenses

| Description | Budgeted FY 2016 | Proposed FY 2017 | Projected | |
|-------------------------------|---------------------|---------------------|---------------------|---------------------|
| | | | FY 2018 | FY 2019 |
| Water Resources Management | \$3,977,053 | \$8,278,542 | \$8,526,898 | \$6,639,490 |
| Water Supply Management | \$6,494,268 | \$6,580,503 | \$6,933,991 | \$8,304,195 |
| Gibraltar Dam Operations | \$425,210 | \$432,597 | \$445,575 | \$470,041 |
| Recycled Water | \$822,229 | \$839,224 | \$868,269 | \$898,301 |
| Water Treatment (Wells) | \$1,759,521 | \$2,235,896 | \$2,302,973 | \$2,572,052 |
| Cater Water Treatment | \$3,891,055 | \$4,007,531 | \$4,127,757 | \$4,445,949 |
| Water Distribution | \$7,403,145 | \$7,560,643 | \$7,787,462 | \$8,276,407 |
| Meter Reading | \$637,564 | \$677,377 | \$697,698 | \$718,629 |
| Water Laboratories | \$728,434 | \$742,286 | \$764,555 | \$787,491 |
| Water Drought | \$5,381,709 | \$3,226,476 | \$3,226,476 | \$0 |
| TOTAL O&M EXPENSES | \$31,520,188 | \$34,581,075 | \$35,681,654 | \$33,112,555 |

Table 6 shows the water enterprise projected capital improvement program (CIP). The CIP program is projected to be rate funded through annual transfers from the Operating Fund. Drought related capital projects are for groundwater well rehabilitation and replacement projects.

Table 6
City of Santa Barbara
Capital Improvement Program

| Project Number | Program | Approved FY 2016 | Proposed | | |
|----------------|---|--------------------|--------------------|--------------------|---------------------|
| | | | FY 2017 | FY 2018 | FY 2019 |
| 8201 | Water Main Replacement Program | \$4,700,000 | \$4,700,000 | \$4,700,000 | \$4,700,000 |
| | Water Meter Replacement Program | \$1,000,000 | \$500,000 | \$500,000 | \$500,000 |
| 8359 | Groundwater Supply Program Total | \$0 | \$0 | \$0 | \$0 |
| 8432 | Distribution Pump Station Program | \$300,000 | \$500,000 | \$2,425,000 | \$2,295,500 |
| 8240 | Recycled Water/City Facilities | \$0 | \$0 | \$0 | \$0 |
| 8427 | Distribution Reservoir Program Total | \$109,000 | \$790,000 | \$235,000 | \$300,000 |
| 8239 | Cater Treatment Plant Equipment Maintenance | \$666,000 | \$1,045,000 | \$533,000 | \$123,500 |
| 8292 | Recycled Water Facilities Rehabilitation | \$150,000 | \$150,000 | \$150,000 | \$0 |
| 48244 | Vic Trace Roof Replacement | \$0 | \$0 | \$0 | \$2,100,000 |
| | <u>Drought Related Projects</u> | <u>\$1,250,000</u> | <u>\$350,000</u> | <u>\$350,000</u> | <u>\$0</u> |
| | Total | \$8,175,000 | \$8,035,000 | \$8,893,000 | \$10,019,000 |

Table 7 shows the water enterprise existing and projected debt service, with debt service ramping up to \$12.9 million by FY 2018.

Table 7
City of Santa Barbara
Debt Service

| Description | FY 2016 | FY 2017 | FY 2018 | FY 2019 |
|------------------------------------|--------------------|---------------------|---------------------|---------------------|
| 2013 COP | \$2,137,150 | \$2,136,875 | \$2,138,450 | \$2,136,000 |
| 2002 DWR Loan | \$1,144,246 | \$1,144,246 | \$1,144,246 | \$1,144,246 |
| 2014 Cater/ Ortega SRF | \$848,080 | \$1,699,384 | \$1,699,385 | \$1,699,384 |
| Fiscal Agent & Tax Expense | \$30,825 | \$30,825 | \$31,000 | \$31,000 |
| Desal Debt Service | \$624,122 | \$903,706 | \$3,243,943 | \$3,243,943 |
| CCWA Fixed Expenses | \$4,652,647 | \$4,687,614 | \$4,672,170 | \$4,568,104 |
| Total Existing Debt Service | \$9,437,069 | \$10,602,650 | \$12,929,193 | \$12,822,677 |

Water Enterprise Revenue

Table 8 shows the water enterprise miscellaneous revenue sources.

Table 8
City of Santa Barbara
Misc Revenue

| Description | Budgeted | Proposed | Projected | |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|
| | FY 2016 | FY 2017 | FY 2018 | FY 2019 |
| Misc. Operating Revenues | | | | |
| Hydrant Rental | \$36,000 | \$36,000 | \$36,000 | \$36,000 |
| Water Service & Meters | \$300,000 | \$300,000 | \$300,000 | \$300,000 |
| Water Turn On Fees | \$210,000 | \$210,000 | \$212,100 | \$214,221 |
| Water Tap Fees | \$100,000 | \$100,000 | \$101,000 | \$102,010 |
| JPA Reimbursement | \$17,000 | \$17,000 | \$17,340 | \$17,687 |
| All Other Revenues | \$163,972 | \$82,972 | \$82,972 | \$82,972 |
| Intergovernmental | \$0 | \$0 | \$0 | \$0 |
| Reimbursements | \$0 | \$0 | \$0 | \$0 |
| Loan Proceeds | | | | |
| Phase I&II , III Cater Loans | \$2,383,740 | \$2,146,822 | \$2,146,822 | \$2,146,822 |
| Cater SRF Loan 2012 | \$137,887 | \$276,298 | \$276,298 | \$276,298 |
| TOTAL MISC REVENUES | \$3,348,599 | \$3,169,092 | \$3,172,532 | \$3,176,009 |

Table 9 shows the projected rate revenue based on a late rate adoption. The water enterprise is projected to lose approximately \$488,000 in annual rate revenue due to delaying the adoption of the rates from June 14th 2016 to August 9th 2016.

Table 9
City of Santa Barbara
Annual Rate Revenue Proration

| | Current Rates, FY 2017 Consumption & Meters | Notice Revised Rates, FY 2017 Consumption & Meters | Prorated FY 2017 Revenue¹ |
|---|--|---|---|
| Meter Charges | \$12,722,406 | \$13,062,207 | \$13,033,890 |
| Volumetric Charges | <u>\$24,462,330</u> | <u>\$29,985,266</u> | <u>\$29,525,022</u> |
| | \$37,184,736 | \$43,047,473 | \$42,558,912 |
| Loss from 1 Month Late Adoption: | \$488,561 | | |

¹ Calculated based on 1 months of current rates and 11 months of notice revised rates in FY 2017

Table 10 shows a cash flow projection for the water enterprise. Based on noticed revised rate implementation, the water enterprise is projected to see an increase in rate revenue of approximately 5.27% between FY 2016 and FY 2017. BWA estimates that the water enterprise will require a 26.65% rate revenue increase from notice revised rate revenue in FY 2018 to ensure financial stability with no additional rate increases for FY 2019, should water usage recover to pre-drought levels as projected. While use is projected to be flat in FY 2018, increased water use and customer growth alone is estimated to account for a 13.87% increase in rate revenue in FY 2019.

The City's existing parity debt obligations require debt coverage in the amount of 125 percent, which means that the City's Adjusted Net System Revenues shall amount to at least 125 percent of the Annual Debt Service. The system revenues include funds derived from the ownership and operation of the system including water service charges from the City's customers, miscellaneous service charges, revenues received from contracts, and interest income. In the event that revenues are lower than expected or costs are higher than expected, the City has established a Rate Stabilization Fund which can be used to meet certain debt coverage requirements. The projections in **Table 10** show the need to use some of the Rate Stabilization Fund to meet debt coverage requirements in FY 2017.

Table 10
City of Santa Barbara
Cash Flow Projection

| | Projected | | | |
|--|------------------|------------------|------------------|-------------------|
| | FY 2016 | FY 2017 | FY 2018 | FY 2019 |
| Beginning Fund Balance | | | | |
| Total Reserves | \$17,510,136 | \$23,306,105 | \$16,048,444 | \$15,780,264 |
| % Rate Revenue Increase | | 5.27% | 26.65% | 13.87% |
| % Interest Rate on Reserves | 1.3% | 1.00% | 1.00% | 1.50% |
| REVENUES | | | | |
| Operating Revenue | | | | |
| Meter Charges | \$12,683,518 | \$13,033,890 | \$16,474,576 | \$16,525,822 |
| Volumetric Charges | 27,743,704 | 29,525,022 | 37,428,075 | 44,855,476 |
| Interest Income | 224,130 | 233,061 | 160,484 | 236,704 |
| Miscellaneous Revenue | <u>826,972</u> | <u>745,972</u> | <u>749,412</u> | <u>752,890</u> |
| Total Operating Revenues | \$41,478,324 | \$43,537,945 | \$54,812,547 | \$62,370,891 |
| Capital Revenues | | | | |
| Phase I&II , III Cater Loans | \$2,383,740 | \$2,146,822 | \$2,146,822 | \$2,146,822 |
| Cater SRF Loan 2012 | <u>137,887</u> | <u>276,298</u> | <u>276,298</u> | <u>276,298</u> |
| Total Water Capital Fund Revenue | \$2,521,627 | \$2,423,120 | \$2,423,120 | \$2,423,120 |
| TOTAL REVENUES | \$43,999,951 | \$45,961,064 | \$57,235,667 | \$64,794,011 |
| EXPENSES | | | | |
| Operating Expenses | | | | |
| Water Resources Management | \$3,977,053 | \$8,278,542 | \$8,526,898 | \$6,639,490 |
| Water Supply Management | 6,494,268 | 6,580,503 | 6,933,991 | 8,304,195 |
| Gibraltar Dam Operations | 425,210 | 432,597 | 445,575 | 470,041 |
| Recycled Water | 822,229 | 839,224 | 868,269 | 898,301 |
| Water Treatment (Wells) | 1,759,521 | 2,235,896 | 2,302,973 | 2,572,052 |
| Cater Water Treatment | 3,891,055 | 4,007,531 | 4,127,757 | 4,445,949 |
| Water Distribution | 7,403,145 | 7,560,643 | 7,787,462 | 8,276,407 |
| Meter Reading | 637,564 | 677,377 | 697,698 | 718,629 |
| Water Laboratories | 728,434 | 742,286 | 764,555 | 787,491 |
| Water Drought | <u>5,381,709</u> | <u>3,226,476</u> | <u>3,226,476</u> | <u>0</u> |
| Total Operating Expenses | \$31,520,188 | \$34,581,075 | \$35,681,654 | \$33,112,555 |
| Capital Expenses | | | | |
| Debt Service | \$9,437,069 | \$10,602,650 | \$12,929,193 | \$12,822,677 |
| Capital Improvement Plan | <u>8,175,000</u> | <u>8,035,000</u> | <u>8,893,000</u> | <u>10,019,000</u> |
| Total Capital Expenses | \$17,612,069 | \$18,637,650 | \$21,822,193 | \$22,841,677 |
| TOTAL EXPENSES | \$49,132,257 | \$53,218,725 | \$57,503,846 | \$55,954,231 |
| NET REVENUES | (\$5,132,307) | (\$7,257,661) | (\$268,180) | \$8,839,779 |
| Ending Fund Balance | | | | |
| Plus: Midyear Fund Adjustments | \$10,928,276 | | | |
| Total Reserves | \$23,306,105 | \$16,048,444 | \$15,780,264 | \$24,620,044 |
| Minimum Fund Targets | | | | |
| Emergency Reserve (15% of Op. Budget) | \$6,777,559 | \$7,291,627 | \$6,890,285 | \$7,194,435 |
| Future Budget Reserve (10% of Op. Budget) | 4,518,373 | 4,861,085 | 4,593,523 | 4,796,290 |
| Capital Reserve | <u>7,660,213</u> | <u>7,660,214</u> | <u>7,660,215</u> | <u>7,660,216</u> |
| Total Unrestricted Fund Target | \$18,956,144 | \$19,812,926 | \$19,144,023 | \$19,650,941 |
| Target Met | yes | no | no | yes |
| Rate Stabilization Fund | \$5,000,000 | \$5,000,000 | \$5,000,000 | \$5,000,000 |
| Debt Service Coverage (Min. 1.25x) | 1.32 | 1.07 | 1.67 | 2.47 |
| Target Met | yes | no | yes | yes |
| Debt Service Coverage Utilizing Rate | | | | |
| Stabilization Fund in FY 2017 (Min. 1.25x) | 1.32 | 1.54 | 1.67 | 2.47 |
| Target Met | yes | yes | yes | yes |

Cost of Service

Table 11 and **Table 12** provide an allocation of O&M expenses and Capital assets, respectively, to billing components. The purpose of the expense and asset allocation is to determine the percentage of FY 2017 O&M and Capital revenue requirements, determined in **Table 13**, to be recovered from each rate component.

System billing components, including water use, maximum day and maximum hour capacity requirements, monthly bills, and meter equivalents are shown in **Table 14**.

Table 11
City of Santa Barbara
Cost of Service - O&M Allocation

| O&M Allocation | Base | Max Day | Max Hour | Fire | Meter | Billing | Recycled Water | Desal | Conservation | General | Total |
|----------------------------|------|---------|----------|------|-------|---------|----------------|-------|--------------|---------|-------|
| Water Resources Management | | | | | | | | | | 100% | 100% |
| Water Supply Management | 93% | | | | 0% | | | | 7% | | 100% |
| CCWA Fixed Expenses | 93% | | | | | | | | 7% | | 100% |
| Desalinated Water Costs | | | | | | | | 100% | | | 100% |
| Gibraltar Dam Operations | 56% | 44% | 0% | | | | | | | | 100% |
| Recycled Water | | | | | | | 100% | | | | 100% |
| Water Treatment (Wells) | 56% | 44% | 0% | | | | | | | | 100% |
| Cater Water Treatment | 56% | 44% | 0% | | | | | | | | 100% |
| Water Distribution | 31% | 24% | 30% | 10% | 5% | | | | | | 100% |
| Meter Reading | | | | | | 100% | | | | | 100% |
| Water Laboratories | 100% | | | | | | | | | | 100% |
| Water Drought | 77% | | | | | | | | 23% | | 100% |

| O&M Allocation | Base | Max Day | Max Hour | Fire | Meter | Billing | Recycled Water | Desal | Conservation | General | Total |
|-------------------------------|---------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|---------------------|
| Water Resources Management | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$3,886,225 | \$3,886,225 |
| Water Supply Management | \$6,090,478 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$490,025 | \$0 | 6,580,503 |
| CCWA Fixed Expenses | \$4,338,546 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$349,068 | \$0 | 4,687,614 |
| Desalinated Water Costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,392,317 | \$0 | \$0 | 4,392,317 |
| Gibraltar Dam Operations | \$243,456 | \$189,141 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$432,597 |
| Recycled Water | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$839,224 | \$0 | \$0 | \$0 | \$839,224 |
| Water Treatment (Wells) | \$1,258,314 | \$977,582 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,235,896 |
| Cater Water Treatment | \$2,255,351 | \$1,752,180 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,007,531 |
| Water Distribution | \$2,357,271 | \$1,831,361 | \$2,237,915 | \$756,064 | \$378,032 | \$0 | \$0 | \$0 | \$0 | \$0 | \$7,560,643 |
| Meter Reading | \$0 | \$0 | \$0 | \$0 | \$0 | \$677,377 | \$0 | \$0 | \$0 | \$0 | \$677,377 |
| Water Laboratories | \$742,286 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$742,286 |
| Water Drought | \$2,500,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$726,476 | \$0 | \$3,226,476 |
| TOTAL O&M EXPENSES | \$19,785,702 | \$4,750,263 | \$2,237,915 | \$756,064 | \$378,032 | \$677,377 | \$839,224 | \$4,392,317 | \$1,565,569 | \$3,886,225 | \$39,268,689 |
| % Allocation | 50% | 12% | 6% | 2% | 1% | 2% | 2% | 11% | 4% | 10% | 100% |

Table 12
City of Santa Barbara
Cost of Service - Capital Allocation

| Capital Allocation | Base | Max Day | Max Hour | Fire | Meter | Billing | Recycled Water | Desal | Conservation | General | Total |
|------------------------------------|------|---------|----------|------|-------|---------|----------------|-------|--------------|---------|-------|
| Source of Supply | 100% | | | | | | | | | | 100% |
| Storage/Reservoir | 51% | 39% | 0% | 10% | | | | | | | 100% |
| Treatment Plant and Related Assets | 56% | 44% | 0% | | | | | | | | 100% |
| Transmission | 56% | 44% | 0% | | | | | | | | 100% |
| Distribution | 31% | 24% | 30% | 10% | 5% | | | | | | 100% |
| Pump Stations | 37% | 28% | 35% | | | | | | | | 100% |
| Firelines/Hydrants | | | | 100% | | | | | | | 100% |
| Meters | | | | | 100% | | | | | | 100% |
| Billing related assets | | | | | | 100% | | | | | 100% |
| Recycled Water related assets | | | | | | | 100% | | | | 100% |
| General assets | | | | | | | | | | 100% | 100% |

| Capital Allocation | Base | Max Day | Max Hour | Fire | Meter | Billing | Recycled Water | Desal | Conservation | General | RCLD Total |
|------------------------------------|----------------------|---------------------|--------------------|--------------------|---------------------|------------|--------------------|------------|--------------|---------------------|----------------------|
| Source of Supply | \$9,825,847 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$9,825,847 |
| Storage | \$26,136,045 | \$20,305,060 | \$0 | \$5,160,123 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$51,601,228 |
| Treatment Plant and Related Assets | \$28,669,304 | \$22,273,146 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$50,942,451 |
| Transmission | \$40,950,233 | \$31,814,184 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$72,764,416 |
| Distribution | \$445,265 | \$345,926 | \$422,720 | \$142,813 | \$71,407 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,428,131 |
| Pump Stations | \$2,239,304 | \$1,739,713 | \$2,125,922 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$6,104,939 |
| Firelines/Hydrants | \$0 | \$0 | \$0 | \$790,111 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$790,111 |
| Meters | \$0 | \$0 | \$0 | \$0 | \$12,527,128 | \$0 | \$0 | \$0 | \$0 | \$0 | \$12,527,128 |
| Billing related assets | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Recycled Water related assets | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$8,462,326 | \$0 | \$0 | \$0 | \$8,462,326 |
| General assets | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$12,671,475 | \$12,671,475 |
| TOTAL ASSETS | \$108,265,999 | \$76,478,029 | \$2,548,642 | \$6,093,047 | \$12,598,535 | \$0 | \$8,462,326 | \$0 | \$0 | \$12,671,475 | \$227,118,053 |
| % Allocation | 48% | 34% | 1% | 3% | 6% | 0% | 4% | 0% | 0% | 6% | 100% |

Table 13
City of Santa Barbara
Cost of Service - Revenue Requirements

| | FY 2017 | | |
|---|---------------------|----------------------|----------------------|
| | Operating | Capital | Total |
| Revenue Requirements | | | |
| O&M Expenses | \$34,581,075 | | \$34,581,075 |
| CCWA Fixed Expenses | \$4,687,614 | | \$4,687,614 |
| Existing Debt Service | | \$5,011,330 | \$5,011,330 |
| Desal Debt Service | | \$2,073,824 | \$2,073,824 |
| Proposed Debt Service | | \$0 | \$0 |
| Total Revenue Requirements | \$39,268,689 | \$7,085,154 | \$46,353,843 |
| Less: Revenue from Other Sources | | | |
| Capital Reimbursement | | (\$2,423,120) | (\$2,423,120) |
| Interest Income | (\$233,061) | | (\$233,061) |
| Misc & Other Revenues | (\$745,972) | | (\$745,972) |
| Total Revenue from Other Sources | (\$979,033) | (\$2,423,120) | (\$3,402,153) |
| Plus: Adjustments | | | |
| Adjustments for Midyear Increases | \$488,000 | | \$488,000 |
| Adjustments for Net Cash Balance | \$0 | \$2,566,153 | \$2,566,153 |
| Total Adjustments | \$488,000 | \$2,566,153 | \$3,054,153 |
| Revenue Requirement from Rates | \$38,777,656 | \$7,228,188 | \$46,005,844 |

Table 14
City of Santa Barbara
Billing Components

| Customer Class | Use (hcf) | Daily Use (hcf/day) | Maximum Day Requirements | | | Maximum Hour Requirements | | | Monthly Bills | Equivalent Meters | |
|--|------------------|---------------------|--------------------------|--------------------------|--------------------------|-----------------------------|---------------------------|---------------------------|---------------|-------------------|---------------|
| | | | In - Tier Peaking | Total Capacity (hcf/day) | Extra Capacity (hcf/day) | In Tier Peaking X System PF | Total Capacity (hcf/hour) | Extra Capacity (hcf/hour) | | | |
| Inside City Limits | | | | | | | | | | | |
| Single Family Residential (SFR) | 1,436,597 | 3,936 | | 4,888 | 952 | | | 7,499 | 2,611 | 15,823 | 20,535 |
| Tier 1 | 672,897 | 1,844 | 1.04 | 1,916 | 73 | | 1.59 | 2,940 | 1,024 | | |
| Tier 2 | 633,524 | 1,736 | 1.35 | 2,348 | 612 | | 2.08 | 3,602 | 1,254 | | |
| Tier 3 | 130,176 | 357 | 1.75 | 624 | 267 | | 2.68 | 957 | 333 | | |
| Multi-Family Residential (MFR) | 874,927 | 2,397 | | 2,571 | 174 | | | 3,944 | 1,374 | 6,319 | 10,768 |
| Tier 1 | 787,490 | 2,158 | 1.04 | 2,243 | 85 | | 1.59 | 3,441 | 1,198 | | |
| Tier 2 | 83,846 | 230 | 1.35 | 311 | 81 | | 2.08 | 477 | 166 | | |
| Tier 3 | 3,592 | 10 | 1.75 | 17 | 7 | | 2.68 | 26 | 9 | | |
| Commercial/Industrial | 832,912 | 2,282 | | 2,692 | 410 | | | 4,130 | 1,438 | 2,683 | 8,432 |
| Tier 1 | 745,646 | 2,043 | 1.11 | 2,267 | 225 | | 1.70 | 3,479 | 1,211 | | |
| Tier 2 | 87,265 | 239 | 1.77 | 424 | 185 | | 2.72 | 651 | 227 | | |
| Irrigation - Residential | 60,160 | 165 | | 229 | 64 | | | 352 | 122 | 465 | 1,386 |
| Tier 1 | 54,434 | 149 | 1.35 | 202 | 53 | | 2.08 | 309 | 108 | | |
| Tier 2 | 5,726 | 16 | 1.75 | 27 | 12 | | 2.68 | 42 | 15 | | |
| Irrigation - Commercial | 13,355 | 37 | | 52 | 15 | | | 80 | 28 | 124 | 429 |
| Tier 1 | 11,002 | 30 | 1.35 | 41 | 11 | | 2.08 | 63 | 22 | | |
| Tier 2 | 2,353 | 6 | 1.75 | 11 | 5 | | 2.68 | 17 | 6 | | |
| Irrigation - Recreation/Parks/Schools | 40,664 | 111 | | 152 | 40 | | | 232 | 81 | 146 | 717 |
| Tier 1 | 39,885 | 109 | 1.35 | 148 | 39 | | 2.08 | 227 | 79 | | |
| Tier 2 | 779 | 2 | 1.75 | 4 | 2 | | 2.68 | 6 | 2 | | |
| Irrigation - Agriculture | 39,344 | 108 | | 146 | 38 | | | 224 | 78 | 52 | 186 |
| Tier 1 | 39,096 | 107 | 1.35 | 145 | 38 | | 2.08 | 222 | 77 | | |
| Tier 2 | 247 | 1 | 1.75 | 1 | 1 | | 2.68 | 2 | 1 | | |
| Recycled Water | 362,876 | 994 | 1.78 | 1,767 | 772 | | 2.73 | 2,710 | 944 | 85 | 908 |
| Fire Line Service | 0 | 0 | 1.78 | 0 | 0 | | 2.73 | 0 | 0 | 506 | 233 |
| Subtotal Inside City | 3,660,834 | 10,030 | | 12,495 | 2,466 | | | 19,171 | 6,676 | 26,203 | 43,592 |
| Outside City Limits | | | | | | | | | | | |
| | 100% | | | | | | | | | | |
| Single Family Residential (SFR) | 123,267 | 338 | | 434 | 96 | | | 666 | 232 | 1,154 | 1,845 |
| Tier 1 | 49,120 | 135 | 1.04 | 140 | 5 | | 1.59 | 215 | 75 | | |
| Tier 2 | 56,399 | 155 | 1.35 | 209 | 54 | | 2.08 | 321 | 112 | | |
| Tier 3 | 17,748 | 49 | 1.75 | 85 | 36 | | 2.68 | 130 | 45 | | |
| Multi-Family Residential (MFR) | 9,691 | 27 | | 29 | 3 | | | 45 | 16 | 159 | 182 |
| Tier 1 | 8,164 | 22 | 1.04 | 23 | 1 | | 1.59 | 36 | 12 | | |
| Tier 2 | 1,388 | 4 | 1.35 | 5 | 1 | | 2.08 | 8 | 3 | | |
| Tier 3 | 138 | 0 | 1.75 | 1 | 0 | | 2.68 | 1 | 0 | | |
| Commercial/Industrial | 4,252 | 12 | | 15 | 3 | | | 22 | 8 | 24 | 122 |
| Tier 1 | 3,353 | 9 | 1.11 | 10 | 1 | | 1.70 | 16 | 5 | | |
| Tier 2 | 900 | 2 | 1.77 | 4 | 2 | | 2.72 | 7 | 2 | | |
| Irrigation - Residential | 2,535 | 7 | | 10 | 3 | | | 15 | 5 | 14 | 37 |
| Tier 1 | 2,385 | 7 | 1.35 | 9 | 2 | | 2.08 | 14 | 5 | | |
| Tier 2 | 149 | 0 | 1.75 | 1 | 0 | | 2.68 | 1 | 0 | | |
| Irrigation - Commercial | 107 | 0 | | 0 | 0 | | | 1 | 0 | 4 | 7 |
| Tier 1 | 106 | 0 | 1.35 | 0 | 0 | | 2.08 | 1 | 0 | | |
| Tier 2 | 1 | 0 | 1.75 | 0 | 0 | | 2.68 | 0 | 0 | | |
| Irrigation - Recreation/Parks/Schools | 198 | 1 | | 1 | 0 | | | 1 | 0 | 2 | 19 |
| Tier 1 | 198 | 1 | 1.35 | 1 | 0 | | 2.08 | 1 | 0 | | |
| Tier 2 | 0 | 0 | 1.75 | 0 | 0 | | 2.68 | 0 | 0 | | |
| Irrigation - Agriculture | 8,611 | 24 | | 32 | 8 | | | 49 | 17 | 10 | 34 |
| Tier 1 | 8,591 | 24 | 1.35 | 32 | 8 | | 2.08 | 49 | 17 | | |
| Tier 2 | 21 | 0 | 1.75 | 0 | 0 | | 2.68 | 0 | 0 | | |
| Recycled Water | 1,285 | 4 | 1.78 | 6 | 3 | | 2.73 | 10 | 3 | 3 | 12 |
| Fire Line Service | 0 | 0 | 1.78 | 0 | 0 | | 2.73 | 0 | 0 | 18 | 9 |
| Subtotal Outside City | 149,946 | 411 | | 526 | 116 | | | 808 | 281 | 1,388 | 2,265 |
| TOTAL | 3,810,780 | 10,440 | | 13,022 | 2,581 | | | 19,979 | 6,957 | 27,591 | 45,857 |

Table 15 provides an allocation of FY 2017 O&M and Capital revenue requirements, shown in **Table 13**, to each billing component based on O&M and Capital allocations from **Table 11** and **Table 12**, respectively. Additional adjustments to cost components are summarized below:

- General costs are allocated to Base, Max Day, Max hour, Billing, and Recycled Water components in proportion to each cost component, as general costs cannot be tied to a specific function.
- Public fire costs are allocated to the meter component, as all customers benefit from public fire protection.
- Peak costs, including max day and max hour, are allocated 98% to the meter component to ensure revenue stability and meet the water enterprise goal of collecting 30% of rate revenue from fixed charges. Meter charges are a reasonable way of recovering peaking costs because they are levied based on the flow capacity of the meter size, with higher capacity meters paying proportionally more.

Once allocated to cost components, costs are divided by billable units to determine a rate per unit for each component.

Table 15
City of Santa Barbara
Allocation of O&M and Capital

| | Total (Table 13) | Base | Max Day | Max Hour | Fire | Meter | Billing | Recycled Water | Desal (O&M) | Desal (Capital) | Conservation | General |
|---------------------------------|---------------------|--------------------------|--------------------|--------------------|-------------------------|------------------------|---------------------|-------------------------|--------------------------|---------------------------|-----------------------------|--------------------|
| Operating Expenses | \$38,777,656 | \$19,538,293 | \$4,690,864 | \$2,209,931 | \$746,610 | \$373,305 | \$668,907 | \$828,730 | \$4,337,394 | \$0 | \$1,545,992 | \$3,837,630 |
| Allocation % (Table 11) | | 50% | 12% | 6% | 2% | 1% | 2% | 2% | 11% | 0% | 4% | 10% |
| Capital Expenses - Desal Only | \$2,073,824 | | | | | | | | | \$2,073,824 | | |
| Capital Expenses | \$5,154,364 | \$2,457,059 | \$1,735,642 | \$57,841 | \$138,280 | \$285,919 | \$0 | \$192,050 | \$0 | \$0 | \$0 | \$287,575 |
| Allocation % (Table 12) | | 48% | 34% | 1% | 3% | 6% | 0% | 4% | 0% | 0% | 0% | 6% |
| Total Cost | \$46,005,844 | \$21,995,351 | \$6,426,506 | \$2,267,772 | \$884,890 | \$659,224 | \$668,907 | \$1,020,779 | \$4,337,394 | \$2,073,824 | \$1,545,992 | \$4,125,205 |
| Allocation of General Costs | \$0 | \$2,746,348 | \$802,416 | \$283,155 | | \$82,311 | \$83,520 | \$127,455 | | | | (\$4,125,205) |
| Allocation of Public Fire Costs | \$0 | | | | (\$722,719) | \$722,719 | | | | | | |
| Allocation Peak to Meter | \$0 | | (\$7,084,343) | (\$2,499,908) | | \$9,584,252 | | | | | | |
| Allocation of Base to Meter | \$0 | \$0 | | | | \$0 | | | | | | |
| Total Cost of Service | \$46,005,844 | \$24,741,699 | \$144,578 | \$51,019 | \$162,170 | \$11,048,506 | \$752,427 | \$1,148,234 | \$4,337,394 | \$2,073,824 | \$1,545,992 | \$0 |
| Total Units of Service | | 3,446,619 potable hcf | 1,806 hcf/day | 6,010 hcf/hour | 2,905 private fire | 547,374 equiv meter | 331,092 bills/yr | 364,161 recycled hcf | 3,446,619 potable hcf | 547,374 equiv meter | 249,095 highest tier hcf | |
| Total Unit Cost of Service | | \$7.18 per hcf | \$80.05 hcf/day | \$8.49 hcf/hour | \$55.82 private fire | \$20.18 equiv meter | \$2.27 per bill | \$3.15 per hcf | \$1.26 per hcf | \$3.79 per equiv meter | \$6.21 per hcf | |

In **Table 16**, costs are further allocated to customer class by multiplying the billing components for each class in **Table 14** times the appropriate unit rates in **Table 15**. Total costs to be recovered from fixed meter charges amount to \$14,036,928, while variable costs to be recovered from usage charges amounts to \$31,968,917.

Table 16
City of Santa Barbara
Allocation of Costs to Customer Classes

| Customer Class | Base ¹ | Max Day ² | Max Hour ³ | Fire ⁴ | Meter ⁵ | Billing ⁶ | Recycled Water ⁷ | Volumetric Desal ⁸ | Meter Desal ⁹ | Conservation ¹⁰ | Total | Fixed ¹¹ | Variable |
|---------------------------------------|---------------------|----------------------|-----------------------|-------------------|---------------------|----------------------|-----------------------------|-------------------------------|--------------------------|----------------------------|---------------------|---------------------|---------------------|
| Inside City Limits | | | | | | | | | | | | | |
| Single Family Residential (SFR) | \$10,312,669 | \$76,183 | \$22,167 | | \$4,973,760 | \$431,505 | | \$1,807,883 | \$933,584 | \$807,929 | \$19,365,679 | \$6,338,848 | \$13,026,832 |
| Multi-Family Residential (MFR) | \$6,280,704 | \$13,905 | \$11,659 | | \$2,608,169 | \$172,324 | | \$1,101,051 | \$489,558 | \$22,291 | \$10,699,661 | \$3,270,050 | \$7,429,611 |
| Commercial/Industrial | \$5,979,091 | \$32,797 | \$12,208 | | \$2,042,234 | \$73,167 | | \$1,048,177 | \$383,331 | \$541,607 | \$10,112,612 | \$2,498,732 | \$7,613,880 |
| Irrigation - Residential | \$431,862 | \$5,148 | \$1,039 | | \$335,589 | \$12,681 | | \$75,708 | \$62,991 | \$35,539 | \$960,558 | \$411,260 | \$549,298 |
| Irrigation - Commercial | \$95,867 | \$1,237 | \$236 | | \$103,910 | \$3,382 | | \$16,806 | \$19,504 | \$14,602 | \$255,544 | \$126,796 | \$128,748 |
| Irrigation - Recreation/Parks/Schools | \$291,908 | \$3,212 | \$687 | | \$173,547 | \$3,982 | | \$51,174 | \$32,575 | \$4,835 | \$561,919 | \$210,103 | \$351,815 |
| Irrigation - Agriculture | \$282,430 | \$3,063 | \$662 | | \$45,052 | \$1,418 | | \$49,512 | \$8,456 | \$1,536 | \$392,130 | \$54,926 | \$337,203 |
| Recycled Water | | | | | \$219,810 | \$2,318 | \$1,144,183 | | \$41,259 | | \$1,407,569 | \$263,387 | \$1,144,183 |
| Fire Line Service | | | | \$156,366 | | \$13,799 | | | | | \$170,165 | \$170,165 | \$0 |
| Subtotal Inside City | \$23,674,531 | \$135,545 | \$48,659 | \$156,366 | \$10,502,070 | \$714,575 | \$1,144,183 | \$4,150,311 | \$1,971,257 | \$1,428,340 | \$43,925,837 | \$13,344,268 | \$30,581,569 |
| Outside City Limits | | | | | | | | | | | | | |
| Single Family Residential (SFR) | \$884,881 | \$7,699 | \$1,968 | | \$446,886 | \$31,470 | | \$155,126 | \$83,881 | \$110,152 | \$1,722,064 | \$562,238 | \$1,159,826 |
| Multi-Family Residential (MFR) | \$69,564 | \$201 | \$132 | | \$44,083 | \$4,336 | | \$12,195 | \$8,274 | \$859 | \$139,644 | \$56,694 | \$82,951 |
| Commercial/Industrial | \$30,527 | \$234 | \$66 | | \$29,429 | \$654 | | \$5,352 | \$5,524 | \$5,583 | \$77,368 | \$35,607 | \$41,761 |
| Irrigation - Residential | \$18,195 | \$209 | \$43 | | \$8,841 | \$382 | | \$3,190 | \$1,659 | \$928 | \$33,447 | \$10,882 | \$22,564 |
| Irrigation - Commercial | \$765 | \$8 | \$2 | | \$1,696 | \$109 | | \$134 | \$318 | \$4 | \$3,036 | \$2,123 | \$913 |
| Irrigation - Recreation/Parks/Schools | \$1,420 | \$15 | \$3 | | \$4,481 | \$55 | | \$249 | \$841 | \$0 | \$7,064 | \$5,377 | \$1,687 |
| Irrigation - Agriculture | \$61,817 | \$668 | \$145 | | \$8,235 | \$273 | | \$10,837 | \$1,546 | \$128 | \$83,648 | \$10,054 | \$73,594 |
| Recycled Water | | | | | \$2,785 | \$82 | \$4,052 | | \$523 | | \$7,442 | \$3,390 | \$4,052 |
| Fire Line Service | | | | \$5,804 | | \$491 | | | | | \$6,295 | \$6,295 | \$0 |
| Subtotal Outside City | \$1,067,168 | \$9,034 | \$2,359 | \$5,804 | \$546,437 | \$37,852 | \$4,052 | \$187,082 | \$102,567 | \$117,653 | \$2,080,007 | \$692,660 | \$1,387,348 |
| TOTAL | \$24,741,699 | \$144,578 | \$51,019 | \$162,170 | \$11,048,506 | \$752,427 | \$1,148,234 | \$4,337,394 | \$2,073,824 | \$1,545,992 | \$46,005,844 | \$14,036,928 | \$31,968,917 |

1 Use times Table 15 cost per potable hcf

2 Table 14 maximum day capacity (hcf/day) times Table 15 rate per unit of potable maximum day capacity (hcf/day)

3 Table 14 maximum hour capacity (hcf/hour) times Table 15 rate per unit of potable maximum hour capacity (hcf/hour)

4 Table 14 annual fire meter equivalents times Table 15 cost per annual fire meter equivalent

5 Table 14 annual non-fire meter equivalents times Table 15 cost per annual non-fire meter equivalent

6 Table 14 total annual bills times Table 15 cost per bill

7 Table 14 recycled use times Table 15 cost per unit of recycled water (hcf)

8 Table 14 use times Table 15 desal cost per potable hcf

9 Table 14 annual meter equivalents times Table 15 desal cost per annual non-fire meter equivalent

10 Highest tier use times Table 15 cost per highest tier hcf

11 Fire, meter, billing, and meter desal expenses

Table 17 describes the six sources of water that the City utilizes. FY 2017 water supply is projected to be a 35 percent decrease from water supply in FY 2014.

Table 17
City of Santa Barbara
Water Supply Sources

| | Budgeted FY 2016 | Projected | | |
|--|---------------------|---------------|---------------|---------------|
| | | FY 2017 | FY 2018 | FY 2019 |
| Water Supply Sources (AF) - 35% Reduction | | | | |
| Surface Water | | | | |
| Lake Cachuma | 3,000 | 850 | 850 | 5,087 |
| Gibraltar | 0 | 0 | 0 | 0 |
| Reservoir | 500 | 500 | 500 | 1,898 |
| Devil's Canyon | 0 | 0 | 0 | 0 |
| Mission Tunnel | 500 | 500 | 500 | 500 |
| Groundwater | 650 | 300 | 300 | 400 |
| Groundwater - Ortega GWTP | 1,900 | 2,250 | 2,250 | 400 |
| SWP | 0 | 0 | 781 | 619 |
| Purchased Water | 1,100 | 1,500 | 1,500 | 0 |
| Desalinated Water | 521 | 2,344 | 3,125 | 0 |
| Recycled Water | 1,100 | 950 | 966 | 972 |
| TOTAL WATER SUPPLY (AF) | 9,271 | 9,194 | 10,772 | 9,876 |
| | 0.56% | -0.83% | 17.16% | -8.32% |

Note:

Surface water = Cater Treatment cost center

Groundwater = Water Treatment cost center (wellhead treatment)

SWP is purchased thru Central Coast Water Authority (CCWA), flows into Lake Cachuma and then get treated at Cater WTP

Recycled water cost center already includes treatment

Table 18 shows a calculation of the cost of water per AF and HCF for each of the City's six water sources. The costs include supply, treatment, lab and supply management. The Supply Unit Rate includes a projected 4% water loss.

Table 18
City of Santa Barbara
Water Supply Analysis
(Projected 2017)

| Source | Supply Costs | Treatment Costs | Lab Costs | Supply Management | Related Capacity | Rate (\$/AF) | Rate (\$/HCF) | Total Cost (\$) | Available Amt (HCF, 4% Loss) | Supply Unit Rate (\$/HCF) |
|---------------------------------------|--------------|-----------------|-----------|-------------------|------------------|-------------------|---------------|-----------------|------------------------------|---------------------------|
| Lake Cachuma (850 AF) | | | | | | | | | 355,375 | |
| Cachuma COMB | \$2,311,584 | | | | 850 | \$2,719.51 | | | | |
| Cachuma CCRB | \$624,047 | | | | 850 | \$734.17 | | | | |
| Cachuma COMB Dought Expense | \$500,000 | | | | 850 | \$588.24 | | | | |
| Cater Water Treatment | | \$4,007,531 | | | 3,350 | \$1,196.28 | | | | |
| Water Laboratories | | | \$742,286 | | 3,350 | \$221.58 | | | | |
| <u>Other O&M</u> | | | | \$2,032,486 | 8,244 | \$246.55 | | | | |
| Total | | | | | | \$5,706.32 | \$13.10 | \$4,850,375 | | \$13.65 |
| Gibraltar (1,000 AF) | | | | | | | | | 418,089 | |
| Gibraltar Dam Operations | \$432,597 | | | | 1,000 | \$432.60 | | | | |
| Gibraltar Warren Act Charges | \$200,000 | | | | 1,000 | \$200.00 | | | | |
| Cater Water Treatment | | \$4,007,531 | | | 3,350 | \$1,196.28 | | | | |
| Water Laboratories | | | \$742,286 | | 3,350 | \$221.58 | | | | |
| <u>Other O&M</u> | | | | \$2,032,486 | 8,244 | \$246.55 | | | | |
| Total | | | | | | \$2,297.00 | \$5.27 | \$2,297,002 | | \$5.49 |
| SWP/Purchased Water (1,500 AF) | | | | | | | | | 627,133 | |
| State Water Project - CCWA | \$6,000,000 | | | | 1,500 | \$4,000.00 | | | | |
| Water Purchases | \$100,000 | | | | 1,500 | \$66.67 | | | | |
| State Water Project - CCWA Drought | \$2,000,000 | | | | 1,500 | \$1,333.33 | | | | |
| Cater Water Treatment | | \$4,007,531 | | | 3,350 | \$1,196.28 | | | | |

| | | | | | | | | | |
|---|-------------|-----------|-------------|-------|-------------------|---------|---------------------|------------------|----------------|
| Water Laboratories | | \$742,286 | | 3,350 | \$221.58 | | | | |
| <u>Other O&M</u> | | | \$2,032,486 | 8,244 | <u>\$246.55</u> | | | | |
| Total | | | | | \$7,064.40 | \$16.22 | \$10,596,607 | | \$16.90 |
| Ground Water (300 AF) | | | | | | | | 125,427 | |
| 10% Water Treatment (Wells) | \$223,590 | | | 300 | \$745.30 | | | | |
| <u>Other O&M</u> | | | \$2,032,486 | 8,244 | <u>\$246.55</u> | | | | |
| Total | | | | | \$992 | \$2.28 | \$297,554 | | \$2.37 |
| Groundwater - Ortega GWTP (2,250 AF) | | | | | | | | 940,700 | |
| 90% Water Treatment (Wells) | \$2,012,306 | | | 2,250 | \$894.36 | | | | |
| <u>Other O&M</u> | | | \$2,032,486 | 8,244 | <u>\$246.55</u> | | | | |
| Total | | | | | \$1,140.91 | \$2.62 | \$2,567,041 | | \$2.73 |
| Desalinated Water (2,344 AF) | | | | | | | | 979,895 | |
| Desalinated Water O&M | \$4,337,394 | | | 2,344 | \$1,850.62 | | | | |
| <u>Other O&M</u> | | | \$2,032,486 | 8,244 | <u>\$246.55</u> | | | | |
| Total | | | | | \$2,097.17 | \$4.81 | \$4,915,242 | | \$5.02 |
| Total | | | | | | | \$25,523,821 | 3,446,619 | \$7.41 |

The City's 2013 Rate Study established the City's rate structure by defining the various customer classes and tier allotments. The rationale for the tier allotments within each customer class is summarized below:

Single Family Residential (SFR) Tier Allotments:

- Tier 1 (4 HCF/month): Intended for basic health and sanitation needs
- Tier 2 (16 HCF/month): Considered reasonable and efficient irrigation use for an average SFR customer with a household of 3 people, and a landscaped area of 4,000 square feet, under average weather conditions.
- Tier 3 (>16 HCF/month): Reflects discretionary/excessive usage for this customer class. Customers with large lots that exceed average landscaped area are encouraged to get a separate irrigation meter.

Multi-Family Residential (MFR) Tier Allotments:

- Tier 1 (4 HCF/month): Intended for basic health and sanitation needs
- Tier 2 (8 HCF/month): Considered reasonable use for an average MFR dwelling unit. In the 2013 Rate Study, the average water usage for MFR was 5 HCF/month. It has been the City's experience that there is very little water use exceeding MFR Tier 2 allotments, since most of these customers are served by a separate irrigation meter, or have very little irrigated area. A Tier 2 allowance of 8 HCF provides MFR customers water efficient use for indoor needs.
- Tier 3 (>8 HCF/month): Reflects discretionary/excessive usage for this customer class.

Irrigation Meter Tier Allotments:

(Applies to Agriculture, Recreation, and Residential/Commercial Irrigation Meters):

- Tier 1 (monthly budget): Based on monthly landscape budgets calculated based on the landscape area, plant factors and real-time weather data. The monthly irrigation budget represents a reasonable and efficient use based on individual landscape site characteristics.
- Tier 2 (> Tier 1 budgeted use): Reflects discretionary/excessive usage for this customer class.

Commercial Tier Allotments:

- Tier 1 (monthly budget): Based on average usage from January to June for base water needs of the individual business.
- Tier 2 (> Tier 1 budgeted use): Reflects somewhat discretionary usage for this customer class.

Table 19 shows an allocation of the City’s six water sources to customer classes and tiers based on priority level. Each tier is charged the weighted average cost of water based on the allocated sources. The highest priority customer tiers receive the cheapest sources of water, limited to that tiers percentage of each priorities total demand times the water source (or remaining water source left over from a higher priority).

1. The highest priority use is allocated to tier 1 agriculture (Ag) for efficient agricultural use.
2. The second highest priority use is allocated to recreational (Rec) tier 1, single family residential (SFR) tier 1 and multi-family residential (MFR) tier 1 for essential health and safety purposes.
3. The third highest priority use is allocated to commercial tier 1 for efficient commercial uses.
4. The fourth highest priority use is allocated to tier 2 SFR, tier 2 MFR and tier 1 irrigation (Irrig) for efficient irrigation needs.
5. The fifth highest priority use is allocated to tier 2 commercial, tier 3 SFR, tier 3 MFR, tier 2 Ag, tier 2 Rec and tier 2 Irrig.

Table 19
City of Santa Barbara
Unit Cost

| | Usage (hcf) | Groundwater - Desalinated | | | SWP/Purchased | | TOTAL | Weighted Avg Unit Cost ¹ | Priority | |
|-------------------|------------------|---------------------------|----------------|----------------|----------------|----------------|----------------|--|----------|----------|
| | | Groundwater | Ortega GWTP | Water | Gibraltar | Lake Cachuma | | | | Water |
| Tier 1 Ag | 47,687 | 47,687 | | | | | 47,687 | \$2.37 | 1 | |
| Tier 1 Rec | 40,083 | 2,000 | 24,205 | 13,877 | | | 40,083 | \$3.50 | 2 | |
| Tier 1 SFR | 722,017 | 36,032 | 436,013 | 249,971 | | | 722,017 | \$3.50 | 2 | |
| Tier 1 MFR | 795,654 | 39,707 | 480,481 | 275,465 | | | 795,654 | \$3.50 | 2 | |
| Tier 1 Commercial | 748,999 | | | 440,581 | 308,418 | | 748,999 | \$5.21 | 3 | |
| Tier 2 SFR | 689,923 | | | | 89,747 | 290,815 | 309,361 | 689,923 | \$14.04 | 4 |
| Tier 2 MFR | 85,234 | | | | 11,088 | 35,928 | 38,219 | 85,234 | \$14.04 | 4 |
| Tier 1 Irrig | 67,927 | | | | 8,836 | 28,632 | 30,458 | 67,927 | \$14.04 | 4 |
| Tier 2 Commercial | 88,165 | | | | | | 88,165 | 88,165 | \$16.90 | 5 |
| Tier 3 SFR | 147,924 | | | | | | 147,924 | 147,924 | \$16.90 | 5 |
| Tier 3 MFR | 3,730 | | | | | | 3,730 | 3,730 | \$16.90 | 5 |
| Tier 2 Ag | 268 | | | | | | 268 | 268 | \$16.90 | 5 |
| Tier 2 Rec | 779 | | | | | | 779 | 779 | \$16.90 | 5 |
| Tier 2 Irrig | 8,229 | | | | | | 8,229 | 8,229 | \$16.90 | 5 |
| | 3,446,619 | 125,427 | 940,700 | 979,895 | 418,089 | 355,375 | 627,133 | 3,446,619 | | |

1 The Weighted Average Unit cost is calculated by multiplying the weighted average use of each water source in the tier times the Supply Unit Rate in Table 18

Table 20 shows the total base and operating desal operating cost of \$29,079,093 to be recovered by potable use. Water unit costs, allocated in **Table 19**, recover supply costs of \$25,523,815. The net delivery cost of \$3,555,278 is the difference between the base cost and supply cost. Dividing the delivery cost by total potable usage of 3,446,619 results in a cost per unit, or “unit delivery cost” of \$1.03.

Table 20
City of Santa Barbara
Unit Cost

| Delivery Cost Calculation | Cost of Service | Notes |
|----------------------------------|------------------------|-----------------------------|
| Total Base Cost | \$29,079,093 | base + desal operating cost |
| Less: Supply Cost | \$25,523,815 | |
| Net Delivery Cost | \$3,555,278 | |
| | | |
| Total Potable Usage (hcf) | 3,446,619 | |
| Unit Delivery Cost | \$1.03 | |

Table 21 shows the calculation of the peaking cost by customer class and tier. Peaking costs, or extra-capacity costs, represent costs incurred to meet customer peak demands in excess of base use or average daily demand. The extra capacity that is needed to meet maximum day and maximum hour demands (shown in **Table 14**) is multiplied by the unit cost of that extra capacity (shown in **Table 15**) to arrive at the total peaking costs for each customer class and tier. The total peaking costs is then divided by total projected FY 2017 water use to determine the peaking unit cost applied in proposed volumetric water rates.

Table 21
City of Santa Barbara
Peaking Costs

| Peaking Cost Calculation | Max Day Unit Cost | Max Day Extra Capacity | Max Day Costs | Max Hour Unit Cost | Max Hour Extra Capacity | Max Hour Costs | Total Peaking Costs | Potable Use (HCF) | Peaking Unit Cost |
|------------------------------|-------------------|------------------------|---------------|--------------------|-------------------------|----------------|---------------------|-------------------|-------------------|
| Res Tier 1 | \$80.05 | 165 | \$13,168 | \$8.49 | 2,309 | \$19,604 | \$32,773 | 1,517,671 | \$0.02 |
| Res Tier 2/All Irrig* Tier 1 | \$80.05 | 899 | \$71,969 | \$8.49 | 1,843 | \$15,644 | \$87,613 | 930,854 | \$0.09 |
| Res Tier 3/All Irrig* Tier 2 | \$80.05 | 330 | \$26,411 | \$8.49 | 412 | \$3,496 | \$29,907 | 160,930 | \$0.19 |
| Commercial Tier 1 | \$80.05 | 226 | \$18,061 | \$8.49 | 1,217 | \$10,330 | \$28,391 | 748,999 | \$0.04 |
| Commercial Tier 2 | \$80.05 | 187 | \$14,970 | \$8.49 | 229 | \$1,944 | <u>\$16,914</u> | <u>88,165</u> | \$0.19 |
| | | | | | | | \$195,597 | 3,446,619 | |

*All Irrigation includes Agriculture, Recreation, Residential, and Commercial Irrigation usage

Conservation Costs

Conservation costs represent the costs related to the City’s longstanding Water Conservation Program, which has been in place for decades and has experienced increased activity and workload during the current drought. The cost of the program primarily covers staffing, services, and supplies. The conservation measures implemented by the Water Conservation Program have been evaluated for cost effectiveness based on the avoided cost of additional water supplies. Based on **Table 15**, the conservation unit cost is \$6.21 per hcf. Conservation costs are allocated to all inefficient use including Residential Tier 3 and Commercial/Irrigation Tier 2.

Unincorporated Area Costs

The City’s Water Fund provides water treatment and distribution for potable use and fire suppression to those residing both in the City of Santa Barbara and portions of the surrounding Unincorporated Area. Historically, City and Unincorporated Area customers have been treated as separate customer classes. This distinction has been made because the cost of providing service to the customer class located in the Unincorporated Area is greater than the cost of providing the same service to customer classes located inside the City. The cost differences are due to costs associated with topography (more hills and required pumping), density (larger parcels mean more pipe length per parcel), Santa Barbara County regulations, and the fact that approximately 5% of the City’s water rate customers reside in the Unincorporated Area, yet a disproportionate amount of infrastructure, facilities, and staff resources are required to serve them. The infrastructure and resources needed to serve the Unincorporated Area makes up 11% of the City’s water mains and fire lines, 19% of the City’s reservoirs, 30% of the City’s pump stations, and 12% of the City’s Water Distribution staff resources.

While the additional cost of service to Outside City customers is justified, further review is needed on how these additional costs are recovered through water rates. Therefore, it is recommended that the additional cost increment for Unincorporated Areas water rates be temporarily suspended until further review is complete.

Proposed Rates

Table 22 shows the combined calculation of volumetric charges. Components include the supply unit cost from **Table 19**, the delivery cost from **Table 20**, peaking costs from **Table 21** and the conservation unit cost from **Table 15**.

Table 23 shows the combined calculation of meter charges. Components include a meter component, desal component and billing component. The meter and desal component calculations per meter equivalent and the cost per bill are shown in **Table 15**. Both the meter and desal components scale in proportion to the flow capacity of the meter size. The billing component is a flat charge added to each monthly bill.

Table 22 and **Table 23** include a comparison of calculated rates with City noticed rates. The revised rate is within the noticed rate to ensure legal compliance with Proposition 218. The revised rate results are lower than the BWA's calculated rate for certain tiers. The resulting revenue difference for FY 2017 is estimated to be \$1,694,699 and \$893,494 for meter charges.

Table 22
City of Santa Barbara
Proposed Volumetric Rates (Inside City)

| Customer Class | Tier (hcf/mo) | Supply Unit Cost | Delivery Unit Cost | Peaking Unit Cost | Conservation Unit Cost | Total Rate | Noticed Rate | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss |
|--|--------------------|------------------|--------------------|-------------------|------------------------|----------------|--------------|-------------------|-----------------|-----------------------|
| Inside City Limits | | | | | | | | | | |
| SFR | | | | | | | | | | |
| Tier 1 | 4 | \$3.50 | \$1.03 | \$0.02 | \$0.00 | \$4.56 | \$4.89 | \$4.56 | \$0.00 | \$0 |
| Tier 2 | 16 | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$12.97 | \$12.97 | \$2.20 | \$1,277,613 |
| Tier 3 | 16 + | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$6,050 |
| MFR | | | | | | | | | | |
| Tier 1 | 4 | \$3.50 | \$1.03 | \$0.02 | \$0.00 | \$4.56 | \$4.89 | \$4.56 | \$0.00 | \$0 |
| Tier 2 | 8 | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$12.97 | \$12.97 | \$2.20 | \$169,090 |
| Tier 3 | 8 + | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$167 |
| Commercial/Industrial | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$5.21 | \$1.03 | \$0.04 | \$0.00 | \$6.28 | \$7.88 | \$6.28 | \$0.00 | \$0 |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.33 | \$23.94 | \$23.94 | \$0.39 | \$30,934 |
| Irrigation - Residential | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$12.97 | \$12.97 | \$2.20 | \$109,776 |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$266 |
| Irrigation - Commercial | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$12.97 | \$12.97 | \$2.20 | \$22,187 |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$109 |
| Irrigation - Recreation/Parks/Schools | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$3.50 | \$1.03 | \$0.09 | \$0.00 | \$4.63 | \$3.77 | \$3.77 | \$0.86 | \$31,391 |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$36 |
| Irrigation - Agriculture | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$2.37 | \$1.03 | \$0.09 | \$0.00 | \$3.50 | \$3.42 | \$3.42 | \$0.08 | \$2,795 |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$24.27 | \$24.27 | \$0.05 | \$12 |
| Recycled Water | | | | | | | | | | |
| Tier 1 | 100% of allocation | | | | | \$3.15 | \$3.02 | \$3.02 | \$0.13 | <u>\$44,272</u> |
| Total Discount | | | | | | | | | | \$1,694,699 |

Table 22 (Continued)
City of Santa Barbara
Proposed Volumetric Rates (Outside City)

| Customer Class | Tier (hcf/mo) | Supply Unit Cost | Delivery Unit Cost | Peaking Unit Cost | Conservation Unit Cost | Total Rate | Noticed Rate | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss | |
|--|--------------------|------------------|--------------------|-------------------|------------------------|----------------|--------------|-------------------|-----------------|-----------------------|--|
| Outside City Limits | | | | | | | 100% | 130% | | | |
| Surcharge | | | | | | | | | | | |
| SFR | | | | | | | | | | | |
| Tier 1 | 4 | \$3.50 | \$1.03 | \$0.02 | \$0.00 | \$4.56 | \$6.36 | \$4.56 | \$0.00 | \$0 | |
| Tier 2 | 16 | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$16.86 | \$12.97 | \$2.20 | \$113,740 | |
| Tier 3 | 16 + | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$825 | |
| MFR | | | | | | | | | | | |
| Tier 1 | 4 | \$3.50 | \$1.03 | \$0.02 | \$0.00 | \$4.56 | \$6.36 | \$4.56 | \$0.00 | \$0 | |
| Tier 2 | 8 | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$16.86 | \$12.97 | \$2.20 | \$2,799 | |
| Tier 3 | 8 + | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$6 | |
| Commercial/Industrial | | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$5.21 | \$1.03 | \$0.04 | \$0.00 | \$6.28 | \$10.24 | \$6.28 | \$0.00 | \$0 | |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.33 | \$31.12 | \$23.94 | \$0.39 | \$319 | |
| Irrigation - Residential | | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$16.86 | \$12.97 | \$2.20 | \$4,810 | |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$7 | |
| Irrigation - Commercial | | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$14.04 | \$1.03 | \$0.09 | \$0.00 | \$15.17 | \$16.86 | \$12.97 | \$2.20 | \$214 | |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$0 | |
| Irrigation - Recreation/Parks/Schools | | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$3.50 | \$1.03 | \$0.09 | \$0.00 | \$4.63 | \$4.90 | \$3.77 | \$0.86 | \$156 | |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$0 | |
| Irrigation - Agriculture | | | | | | | | | | | |
| Tier 1 | 100% of allocation | \$2.37 | \$1.03 | \$0.09 | \$0.00 | \$3.50 | \$4.45 | \$3.42 | \$0.08 | \$614 | |
| Tier 2 | All other hcf | \$16.90 | \$1.03 | \$0.19 | \$6.21 | \$24.32 | \$31.55 | \$24.27 | \$0.05 | \$1 | |
| Recycled Water | | | | | | | | | | | |
| Tier 1 | 100% of allocation | | | | | \$3.15 | \$3.93 | \$3.02 | \$0.13 | \$157 | |
| Total Discount | | | | | | | | | | \$123,648 | |

Table 23
City of Santa Barbara
Proposed Meter Charges

Inside City Meter Charges

| Meter Size | Meter Ratio | Meter Component | Desal Component | Billing Component | Proposed Charge | Noticed Rate | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss |
|------------|-------------|-----------------|-----------------|-------------------|-----------------|--------------|-------------------|-----------------|-----------------------|
| 5/8" | 1.00 | \$20.18 | \$3.79 | \$2.27 | \$26.25 | \$24.50 | \$24.50 | \$1.75 | \$368,100 |
| 3/4" | 1.50 | \$30.28 | \$5.68 | \$2.27 | \$38.23 | \$35.60 | \$35.60 | \$2.63 | \$35,964 |
| 1" | 2.50 | \$50.46 | \$9.47 | \$2.27 | \$62.21 | \$57.80 | \$57.80 | \$4.41 | \$173,205 |
| 1 1/2" | 5.00 | \$100.92 | \$18.94 | \$2.27 | \$122.14 | \$113.29 | \$113.29 | \$8.85 | \$75,241 |
| 2" | 8.00 | \$161.48 | \$30.31 | \$2.27 | \$194.06 | \$179.89 | \$179.89 | \$14.17 | \$135,125 |
| 3" | 17.50 | \$353.23 | \$66.30 | \$2.27 | \$421.80 | \$390.77 | \$390.77 | \$31.03 | \$11,607 |
| 4" | 31.50 | \$635.81 | \$119.34 | \$2.27 | \$757.43 | \$701.54 | \$701.54 | \$55.89 | \$12,911 |
| 6" | 65.00 | \$1,312.00 | \$246.26 | \$2.27 | \$1,560.53 | \$1,445.18 | \$1,445.18 | \$115.35 | \$19,033 |
| 8" | 120.00 | \$2,422.15 | \$454.64 | \$2.27 | \$2,879.06 | \$2,666.07 | \$2,666.07 | \$212.99 | \$7,029 |
| 10" | 190.00 | \$3,835.07 | \$719.85 | \$2.27 | \$4,557.19 | \$4,219.93 | \$4,219.93 | \$337.26 | \$0 |
| | | | | | | | | | \$838,214 |

Outside City Meter Charges

| Meter Size | Meter Ratio | Meter Component | Desal Component | Billing Component | 100% | 130% | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss |
|------------|-------------|-----------------|-----------------|-------------------|-----------------|--------------|-------------------|-----------------|-----------------------|
| | | | | | Proposed Charge | Noticed Rate | | | |
| 5/8" | 1.00 | \$20.18 | \$3.79 | \$2.27 | \$26.25 | \$31.85 | \$24.50 | \$1.75 | \$16,535 |
| 3/4" | 1.50 | \$30.28 | \$5.68 | \$2.27 | \$38.23 | \$46.28 | \$35.60 | \$2.63 | \$3,330 |
| 1" | 2.50 | \$50.46 | \$9.47 | \$2.27 | \$62.21 | \$75.14 | \$57.80 | \$4.41 | \$17,059 |
| 1 1/2" | 5.00 | \$100.92 | \$18.94 | \$2.27 | \$122.14 | \$147.28 | \$113.29 | \$8.85 | \$1,947 |
| 2" | 8.00 | \$161.48 | \$30.31 | \$2.27 | \$194.06 | \$233.86 | \$179.89 | \$14.17 | \$3,117 |
| 3" | 17.50 | \$353.23 | \$66.30 | \$2.27 | \$421.80 | \$508.00 | \$390.77 | \$31.03 | \$341 |
| 4" | 31.50 | \$635.81 | \$119.34 | \$2.27 | \$757.43 | \$912.00 | \$701.54 | \$55.89 | \$0 |
| 6" | 65.00 | \$1,312.00 | \$246.26 | \$2.27 | \$1,560.53 | \$1,878.73 | \$1,445.18 | \$115.35 | \$1,269 |
| 8" | 120.00 | \$2,422.15 | \$454.64 | \$2.27 | \$2,879.06 | \$3,465.89 | \$2,666.07 | \$212.99 | \$0 |
| 10" | 190.00 | \$3,835.07 | \$719.85 | \$2.27 | \$4,557.19 | \$5,485.91 | \$4,219.93 | \$337.26 | \$0 |
| | | | | | | | | | \$43,597 |

Inside City Fireline

| Meter Size | Meter Ratio | Meter Component | Desal Component | Billing Component | Proposed Charge | Noticed Rate | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss |
|------------|-------------|-----------------|-----------------|-------------------|-----------------|--------------|-------------------|-----------------|-----------------------|
| 1" | 0.01 | \$0.50 | | \$2.27 | \$2.77 | \$2.76 | \$2.76 | \$0.01 | \$0 |
| 1 1/2" | 0.03 | \$1.46 | | \$2.27 | \$3.73 | \$3.64 | \$3.64 | \$0.09 | \$0 |
| 2" | 0.06 | \$3.10 | | \$2.27 | \$5.38 | \$5.16 | \$5.16 | \$0.22 | \$394 |
| 4" | 0.34 | \$19.22 | | \$2.27 | \$21.49 | \$19.99 | \$19.99 | \$1.50 | \$3,895 |
| 6" | 1.00 | \$55.82 | | \$2.27 | \$58.10 | \$53.67 | \$53.67 | \$4.43 | \$3,798 |
| 8" | 2.13 | \$118.96 | | \$2.27 | \$121.24 | \$111.77 | \$111.77 | \$9.47 | \$2,499 |
| 10" | 3.83 | \$213.94 | | \$2.27 | \$216.21 | \$199.17 | \$199.17 | \$17.04 | \$375 |
| 12" | 6.19 | \$345.57 | | \$2.27 | \$347.84 | \$320.29 | \$320.29 | \$27.55 | \$303 |
| | | | | | | | | | \$11,264 |

Outside City Fireline

| Meter Size | Meter Ratio | Meter Component | Desal Component | Billing Component | 100% | 130% | Revised Unit Rate | Rate Difference | 11 Month Revenue Loss |
|------------|-------------|-----------------|-----------------|-------------------|-----------------|--------------|-------------------|-----------------|-----------------------|
| | | | | | Proposed Charge | Noticed Rate | | | |
| 1" | 0.01 | \$0.50 | | \$2.27 | \$2.77 | \$3.59 | \$2.76 | \$0.01 | \$0 |
| 1 1/2" | 0.03 | \$1.46 | | \$2.27 | \$3.73 | \$4.73 | \$3.64 | \$0.09 | \$0 |
| 2" | 0.06 | \$3.10 | | \$2.27 | \$5.38 | \$6.71 | \$5.16 | \$0.22 | \$21 |
| 4" | 0.34 | \$19.22 | | \$2.27 | \$21.49 | \$25.99 | \$19.99 | \$1.50 | \$50 |
| 6" | 1.00 | \$55.82 | | \$2.27 | \$58.10 | \$69.77 | \$53.67 | \$4.43 | \$243 |
| 8" | 2.13 | \$118.96 | | \$2.27 | \$121.24 | \$145.30 | \$111.77 | \$9.47 | \$104 |
| 10" | 3.83 | \$213.94 | | \$2.27 | \$216.21 | \$258.92 | \$199.17 | \$17.04 | \$0 |
| 12" | 6.19 | \$345.57 | | \$2.27 | \$347.84 | \$416.38 | \$320.29 | \$27.55 | \$0 |
| | | | | | | | | | \$419 |

Total Discount

\$893,494

Table 24 shows the FY 2017 interest income funding calculation. BWA’s cost of service resulted in rates for certain tiers and customers which are higher than the City noticed rates. This difference is recommended to be temporarily funded through non-rate revenues.

BWA recommends the City fund the difference of \$2,588,193 through interest income earned on water enterprise invested fund balances from FY 2011 to FY 2015, estimated to total \$3,087,619.

Table 24
City of Santa Barbara
FY 2017 Interest Income Funding Calculation

Revenue Difference & Funding Source

FY 2017 Revenue Difference

| | |
|-------------------------|--------------------|
| Meter Charges | \$893,494 |
| Volumetric Charges | <u>\$1,694,699</u> |
| Total Difference | \$2,588,193 |

Funding Source

| | |
|--|--------------------|
| Water Enterprise Interest Income (FY 2011 - FY 2015) ¹ | \$3,087,619 |
|--|--------------------|

1 Historical actual interest earnings provided by City