*STAFF REPORT*

**To:** **Coastside County Water District Board of Directors**

**From:** **Mary Rogren, Assistant General Manager**

**Agenda:** **April 11, 2017**

**Report Date:** **April 7, 2017**

**Subject:** **FY 2017/18 to FY 2021/22 Financing Plan and Proposed Water Rate Increase; Cost-of-Service Analysis**

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**Recommendation:**
No Board action required at this time.

**Background:**

Financing Plan
The District utilizes a multi-year financing model (recently updated by the District's Rate Consultants, HF&H Consultants (HF&H) and considered to be an industry standard approach) to evaluate the impact of its rate increases on the financial reserves of the District. In a presentation to the Board, staff and HF&H will review the model (Exhibit A), focusing on HF&H's attached report, "Water Rate Update FY 2017/18" (Exhibit B). The report summarizes the series of rate increases needed to fund District operating expenses and capital improvement program and to build and maintain an adequate level of reserves.

As discussed in last year's financing plan discussions and as recommended by HF&H, the District should target a Cash Reserve Balance at the beginning of the fiscal year to include:

- 25% of Operating Expenses (for ongoing cashflow requirements; equal to 1 ½ billing cycles (90 days); *(approximately $2.1M)); plus*
- 100% of annual Debt Service payments *($1.1M); plus*
- 100% of the year's "Pay as you go" Capital Improvement Projects *(averages $3.3M per year over next five years)*

For a total of nearly $6.5M in targeted cash reserves for FY 2017/18.

Although the District's projected cash reserves at the end of FY 2016/17 (at $4.6M) will still be $1.9M short of the ideal target of $6.5M, cash reserves will have increased approximately $2M over the prior year-end cash balance primarily due to 1) financing a significant portion of its capital improvements with debt financing vs. from revenue during the year; 2) implementing a 10% rate increase on 7/1/16;

and 3) realizing operating expense savings, particularly given increased use of local water sources vs. SFPUC.

Given the increase in cash reserves during FY 2016/17, and based on the draft FY 2017/18 Operations Budget and draft FY 2017/18 to FY 2026/27 CIP, staff recommends a moderate increase of 5% on the consumption quantity charge and 0% on the base charge, resulting in an overall increase in revenue of 3.9%. The rate increase will result in a small dip in cash reserves in FY 2017/18 (given timing of capital spending between FY 2016/17 and FY 2017/18) but should keep the District on course to continue to increase its cash reserve balances over the next five years.

<u>Cost-of-Service Analysis</u>
In developing the FY 2015/16 budget, the District retained HF&H to evaluate the District's rate structure and to develop cost-of-service-based rates which would comply with the substantive requirements of Proposition 218 as interpreted by the courts, including the April 2015 Appellate Court decision in *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano.* Following recommendations in the HF&H analysis detailed in a report dated May 8, 2015 and presented to the Board at its May 12, 2015 meeting, the District implemented significant changes to the its rate structure that resulted in a realignment of the tier breakpoints to reflect service cost allocations. The revised rate structure went into effect July 1, 2015.

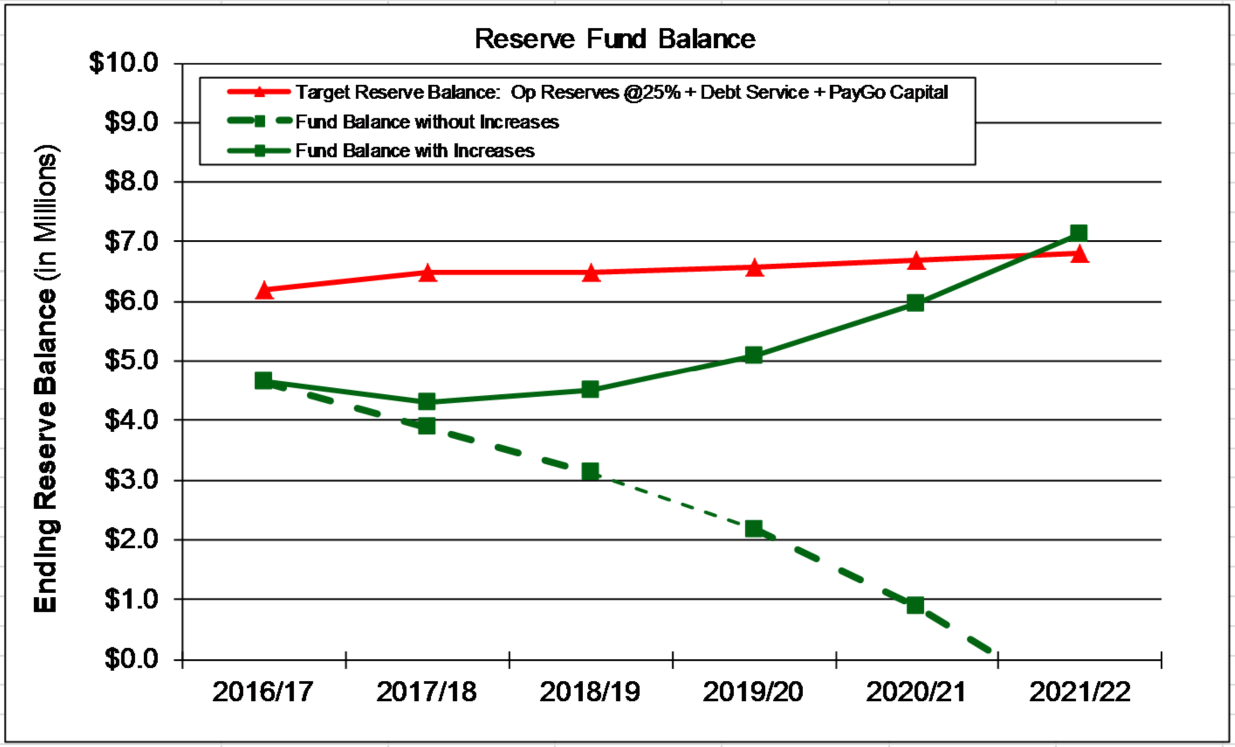
The District retained HF&H in 2016 in preparing the FY 2016/17 cost-of-service analysis and rate proposal, and again in 2017 in preparing the FY 2017/18 cost of service analysis and rate proposal. HF&H determined that the methodology and cost of service allocations used in the FY 2015/16 budget are still applicable. Therefore, staff proposes to apply the FY 2017/18 proposed 5% rate increase uniformly across the District's consumption quantity charges given:

- Budgeted FY 2017/18 operating expenses differ by only 2% from the expenses used as the basis for the FY 2015/16 cost-of-service analysis.
- The decline in water sales accounting since FY 2015/16 for the majority of the overall rate increase results from increased conservation across all District customer classes.
- Allocation of FY 2017/18 capital cost funding resulting from the uniform rate increase would be consistent with the FY 2015/16 cost-of-service analysis because the allocation factors have not changed significantly.

In addition, HF&H noted that "the District can hold its base charges where they currently are and remain compliant with Proposition 218 because the resulting charge is proportionate to the cost of providing service. By not increasing the base service charge and only increasing the quantity charge, cost recovery from the fixed charges shifts slightly to the variable charges without disproportionate effect on customer bills because all customers are treated equally."

# EXHIBIT A

| | | | | | | |
|---|---|---|---|---|---|---|
| **Coastside County Water District** | | | | | | |
| **Water Rate Analysis** | Approved | | | | | |
| **Table 1. Summary** | Budget | | | Projections | | |
| | **2016/17** | **2017/18** | **2018/19** | **2019/20** | **2020/21** | **2021/22** |
| **Base Charge Revenue Changes** | | % | 5% | 5% | 5% | 5% |
| **Quantity Charge Revenue Changes** | | 5% | 5% | 5% | 5% | 5% |




*Note: model uses average CIP of $3.3M per year*

Exhibit B

# COASTSIDE COUNTY WATER DISTRICT

## WATER RATE UPDATE – FY 2017-18



**April 11, 2017**

HF&H Consultants, LLC

# COASTSIDE COUNTY WATER DISTRICT

766 Main Street
Half Moon Bay, CA 94019

# WATER RATE UPDATE – FY 2017-18

*April 11, 2017*

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April 11, 2017

Mr. David Dickson
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, California 94019

**Subject: Water Rate Update – FY 2017-18**

Dear Mr. Dickson:

HF&H is pleased to submit this water rate update of the Coastside County Water District's (District) FY 2017-18 rates. The report summarizes the analysis that was conducted to develop the proposed rates.

The District has demonstrated leadership in improving rate payer equity during a time when costs are increasing in compliance with regulatory mandates. It has been a privilege to assist the District with this step forward.

Very truly yours,

HF&H CONSULTANTS, LLC

John W. Farnkopf, P.E., Senior Vice President
Richard J. Simonson., Vice President

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# ACRONYMS

| | |
|---|---|
| FY | Fiscal Year |
| CCF or HCF | Hundred cubic feet of metered water sold; 748 gallons; a cube of water 4.6 feet on edge |
| EMU | Equivalent metered unit |
| GPD | Gallons per Day |
| GPCD | Gallons per Capita per Day |
| O&M | Operations and Maintenance |
| PAYGo | Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources of revenue |
| SFPUC | San Francisco Public Utilities Commission |
| SWRCB | State Water Resources Control Board |

# ACKNOWLEDGEMENTS

District Board

Glenn Reynolds, President
Bob Feldman, Vice President
Arnie Glassberg, Board Director
Ken Coverdell, Board Director
Chris Mickelsen, Board Director

District Staff

Dave Dickson, General Manager
Mary Rogren, Assistant General Manager

HF&H Consultants

John Farnkopf, Sr. Vice President
Rick Simonson, Vice President

# LIMITATIONS

This document was prepared solely for Coastside County Water District in accordance with the contract between the District and HF&H and is not intended for use by any other party for any other purpose.

In preparing this analysis, we relied on information and instructions from the District, which we consider to be accurate and reliable and did not independently verify.

Rounding differences caused by stored values in electronic format may exist.

This document addresses relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.

# SECTION 1. EXECUTIVE SUMMARY

In preparing this water rate update, expenses, revenues, and reserves were projected for a five-year financial planning period from FY 2017-18 through FY 2021-22, with the understanding that the Board will consider and potentially act on proposed rate increases for only the first year of the financial planning period, FY 2017-18. Based on these projections, annual rate increases (effective July 1 of each year through 2021) were derived to meet the funding requirements.

The following findings and recommendations were made.

## 1.1 Findings and Recommendations

1. **Projected FY 2017-18 Operating Shortfall.** The revenue from existing rates is insufficient to cover the District's projected operating and capital needs. Without a rate increase, the $773,018 projected operating deficit would reduce the District's operating and capital reserve fund balance to $3,867,498. In other words, an approximate 7.4% increase in revenue is required to avoid reducing the District's fund balance.

**Figure 1-1. FY 2017-18 Projected Operating Deficit**

| | FY 2017-18 |
|---|---|
| Revenue Requirement | $12,609,223 |
| Non-Operating Revenue | ($1,377,174) |
| Net Revenue Requirement | $11,232,048 |
| | |
| Revenue from Current Rates | $10,459,030 |
| | |
| Surplus/(Deficit) | ($773,018) |
| | *-7.4%* |
| | |
| **District Fund Balance** | |
| Beginning Balance | $4,640,516 |
| Surplus/(Deficit) | ($773,018) |
| EOY Fund Balance | $3,867,498 |
| | |
| *Target EOY Fund Balance* | *$6,475,328* |

2. **Recent Rate Increases.** As a result of increasing capital costs and decreasing revenue from decreasing water sales (the result of successful conservation efforts during the recent drought), the District needed to increase rates by double-digit figures in recent years, 24% in July 2015 and 10% in July 2016.

3. **Proposed Rates (effective 7/1/2017).** Given the recent high rate increases and much improved local and imported water supply conditions, which has stabilized water demand (i.e., it is no longer decreasing), the District's fund balance has increased. The increased fund balance can accommodate increasing rates something less than the 7.4% projected deficit. Working with District staff, we developed a financial plan that results in no increase in the base service charge and a 5% increase in the quantity charges, as shown in **Figure 1-2.**

**Figure 1-2. Current and Proposed Rates (effective 7/1/2017)**

| Base Service Charge | Bi-Monthly Billing | | Monthly Billing | |
|---|---|---|---|---|
| | Current | Proposed | Current | Proposed |
| Meter Size | | No Increase | | No Increase |
| 5/8" | $52.20 | $52.20 | $26.10 | $26.10 |
| 5/8" for 2 dwelling units | $104.39 | $104.39 | $52.20 | $52.20 |
| 3/4" | $78.45 | $78.45 | $39.23 | $39.23 |
| 3/4 inch for 2 dwelling units | $156.89 | $156.89 | $78.45 | $78.45 |
| 1" | $130.76 | $130.76 | $65.38 | $65.38 |
| 1.5" | $252.52 | $252.52 | $126.26 | $126.26 |
| 2" | $418.48 | $418.48 | $209.24 | $209.24 |
| 3" | $915.50 | $915.50 | $457.75 | $457.75 |
| 4" | $3,139.22 | $3,139.22 | $1,569.61 | $1,569.61 |

| Quantity Charge | Bi-Monthly Billing | | | Monthly Billing | | |
|---|---|---|---|---|---|---|
| | HCF | Current | Proposed | HCF | Current | Proposed |
| Residential | | | 5% Increase | | | 5% Increase |
| Tier 1 | 1 to 4 | $9.19 | $9.65 | 1 to 2 | $9.19 | $9.65 |
| Tier 2 | 5 to 16 | $10.26 | $10.77 | 3 to 8 | $10.26 | $10.77 |
| Tier 3 | 17 to 30 | $13.23 | $13.89 | 9 to 15 | $13.23 | $13.89 |
| Tier 4 | Over 30 | $17.53 | $18.41 | Over 15 | $17.53 | $18.41 |
| Non-Residential | per HCF | $11.31 | $11.88 | per HCF | $11.31 | $11.88 |

3. **Residential Bill Impact (effective 7/1/2017).** Increases in residential bills vary depending on the customer's meter size and the amount of water use. The average residential customer has a 5/8" meter and uses 10 HCF during a bi-monthly period. The bill for using 10 HCF will increase $4.90 for the bi-monthly period (or $2.45 per month). If a customer uses less than 10 HCF, the bill impact will be less than $2.45 per month and more if they use more than 10 HCF in a bi-monthly period.

4. **Five-Year Financial Planning.** The proposed rates are part of a five-year projection, but the District is considering, and potentially acting on, only the rates to be effective July 1, 2017. **Figure 1-3** summarizes the projected rate

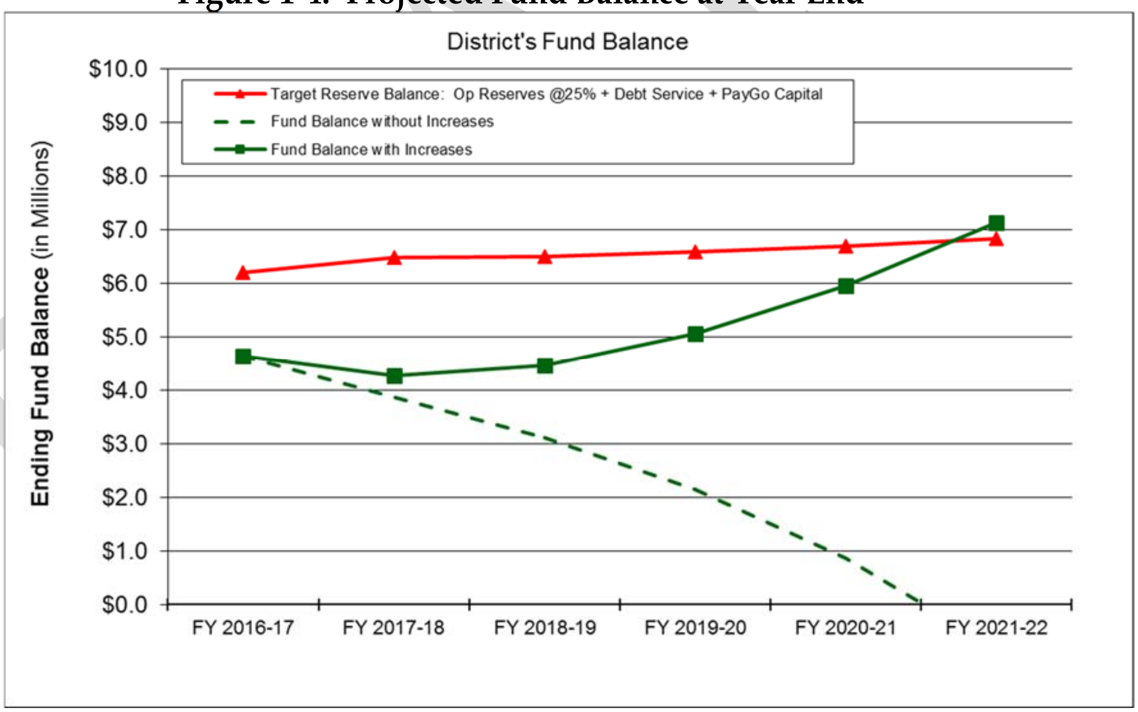
increases for the base and quantity charge over the full five-year planning period.

**Figure 1-3. Annual Projected Rate and Revenue Increases**

| Date of Increase | Base Charge Increase | Quantity Charge Increase | Total Revenue Increase |
|---|---|---|---|
| July 1, 2017 | 0.0% | 5.0% | 3.9% |
| July 1, 2018 | 5.0% | 5.0% | 5.0% |
| July 1, 2019 | 5.0% | 5.0% | 5.0% |
| July 1, 2020 | 5.0% | 5.0% | 5.0% |
| July 1, 2021 | 5.0% | 5.0% | 5.0% |

5. **Reserve Fund Balance (Figure 1-4).** With the recommended rate increases, in **Figure 1-3,** the District's reserve fund balance (solid green line) will achieve the District's reserve target (discussed in detail in **Section 2.2**) by FY 2021-22.

**Figure 1-4. Projected Fund Balance at Year End**



# SECTION 2. REVENUE REQUIREMENT PROJECTIONS

To determine whether additional rate revenue is required, projected operating expenses, and capital expenses are compared with projected revenue from current rates. Annual surpluses and deficits are then applied to the reserve funds. Rates are then increased so that the expenses are covered and reserves are maintained.

## 2.1 Operating and Capital Expense Projections

The District's FY 2017-18 budget served as the basis for determining the operating and capital expense projections. The FY 2017-18 budgeted operating and maintenance (O&M) expenses were projected through FY 2020-21 using appropriate escalation factors. Capital expenses are projected based on the District's current capital improvement program. The operating and capital expense projections are noteworthy in the following respects:

### Operating Expenses

**O&M Expenses** – General operating and maintenance expenses to operate the water system (i.e., salaries and benefits, utility costs, administrative support, etc.) are generally projected to increase during the planning period at the rate of inflation.

**SFPUC water purchases** – The cost to purchase water from the SFPUC is projected to decrease slightly in FY 2017-18 and FY 2018-19 as the District plans to increase the local water supply (i.e., Pilarcitos Well and Denniston project) which will reduce the need for water purchases from the SFPUC. In addition, the SFPUC wholesale cost of water is not expected to increase until July 1, 2019 based on recent financial analysis by the SFPUC.

### Capital Expenses

**Capital projects** – The District's capital expenses are summarized by category in Figure 2-1. The District's annual budgeted capital expenditures range from $2.1 million to $4.2 million during the modeling period. On average, the District expects to spend approximately $3.283 million annually on these projects. The District plans to fund these capital improvements on a pay-as-you-go (PAYGo) basis without issuing debt.

**Debt service** – Debt service is flat (approximately $1.1 million per year) during the planning period as the District does not plan on issuing new debt to fund the capital projects.

**Figure 2-1. Capital Improvement Project Summary**

| Category | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
|---|---|---|---|---|---|
| Equipment Purchase & Replacement | 398,000 | 148,000 | 218,000 | 88,000 | 88,000 |
| Facilities & Maintenance | 1,525,000 | 95,000 | 95,000 | 65,000 | 65,000 |
| Pipeline Projects | 1,130,000 | 1,425,000 | 185,000 | 1,000,000 | 2,900,000 |
| Pump Stations/Tanks/Wells | 330,000 | 1,960,000 | 120,000 | 400,000 | 80,000 |
| Water Supply Development | 100,000 | - | 1,300,000 | 1,000,000 | 1,000,000 |
| Water Treatment Plants | 280,000 | 80,000 | 180,000 | 80,000 | 80,000 |
| **Total** | **$3,763,000** | **$3,708,000** | **$2,098,000** | **$2,633,000** | **$4,213,000** |

## 2.2. Reserve Funds

In addition to covering annual expenses, base and quantity charges need to generate sufficient revenue to maintain adequate operating and capital reserves. It is the District's practice to maintain a single operating and capital reserve fund. For purposes of rate making, we have subdivided the reserves into operating, capital, and debt service components. In this way, it is possible to set target balances for each component based on the components' functions:

- **Operating Reserve** – the Operating Reserve provides working capital for month-to-month operating expenditures. With sufficient working capital, the District can operate without cash flow constraints. At a minimum, we recommend an operating reserve that is based on how frequently customers are billed. This frequency establishes the lag between when the District incurs expenses and when it receives revenue from billings. The District currently bills nearly all of its customer's bi-monthly. In most cases, a rule of thumb used by the California PUC is sufficient for determining the minimum working capital that is needed. The rule states that the allowance for working capital should equal 1.50 times the billing frequency. In the District's case, this equals three months or 90 days, which is roughly 25% of annual operating revenue. As such, during this five-year planning period, the District's target operating reserve ranges from $2.0 to $2.4 million, as operating costs increase each year.

- **Capital Reserve** – the Capital Reserve provides working capital for the District's capital improvement program. The fund balance needs to be sufficient to at least pay contractors without delays caused by cash flow limitations and can fund larger construction projects on a pay-as-you-go basis from rate revenue only[1], thereby eliminating financing costs. The fund balance can also be larger to provide a measure of self-insurance for emergencies. In the District's case, we have recommended a capital reserve target of $3,283,000, which is equal to the District's average annual capital expenditures based on the PAYGo projects

[1] Projects funded from rate revenue are sometimes referred to as "pay-as-you-go" or "PAYGo" projects. By contrast, debt-funded projects are "pay-as-you-use" projects.

projected over the coming five years (as shown if **Figure 2-1**). This target also provides a buffer from debt service payments, which are highest in July.

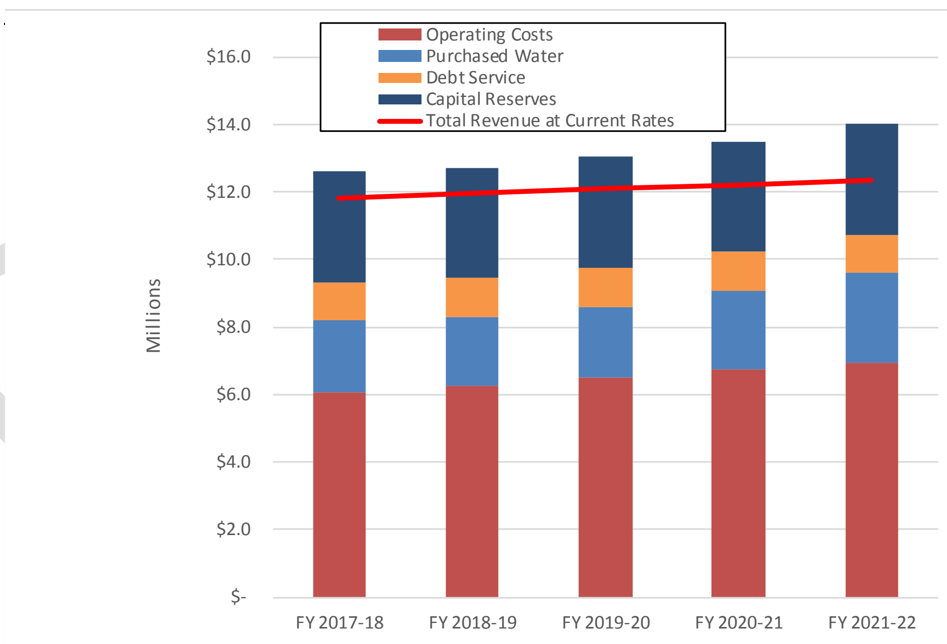
The target capital reserve does not include a margin for emergency contingencies. The District may want to consider an emergency contingency once the current capital reserve target is met, which is projected to occur in FY 2021-22.

- **Debt Service Reserve** – The purpose of a debt service reserve is to provide funding to avoid defaulting on the loan if the District failed to make a loan payment. We recommend maintaining a full year's loan repayment. As such, the District's target debt service reserve is $1.1 million.

## 2.3 Total Revenue Requirements

The major expenses described above that comprise the revenue requirements are summarized and graphed in **Figure 2-2**. As shown in the graph, current revenues at current rates (solid red line)[2] are not sufficient to cover the projected revenue requirements.

**Figure 2-2. Projected Revenue Requirements and Revenue at Current Rates**




| | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
|---|---|---|---|---|---|
| Operating Costs | $6,072,765 | $6,281,504 | $6,507,781 | $6,721,886 | $6,964,117 |
| Purchased Water | 2,105,761 | 2,013,445 | 2,104,180 | 2,355,478 | 2,628,636 |
| Debt Service | 1,147,697 | 1,146,783 | 1,144,468 | 1,143,870 | 1,141,627 |
| Capital Reserves | 3,283,000 | 3,283,000 | 3,283,000 | 3,283,000 | 3,283,000 |
| **Total Revenue Requirement** | **$12,609,223** | **$12,724,731** | **$13,039,429** | **$13,504,234** | **$14,017,380** |

[2] Includes projected annual 1% rebound in water consumption by current customers (beginning FY 2018/19)

## 2.4 Revenue Increases

To top portion of **Figure 2-3** summarizes the projected revenue requirements **(**from **Figure 2-2)**, revenue from current rates, annual surpluses and deficits, and the fund balance, all before rate increases.

The bottom portion of **Figure 2-3** shows the projected revenue increases to offset future deficits so that the District's fund balance is maintained at an adequate level and reaches the target balance by the end of the five-year planning period. The revenue increases that are projected would become effective July 1 of each year. This coming year's rate increase, which is the only rate increase which the District Board is considering, if adopted, will become effective July 1, 2017 and will increase revenue 3.9%. The magnitude of this increase compares favorably to recent increases, an average increase of 24% on July 1, 2015 and a 10% increase on July 1, 2016.

**Figure 2-3. Revenue Increases**

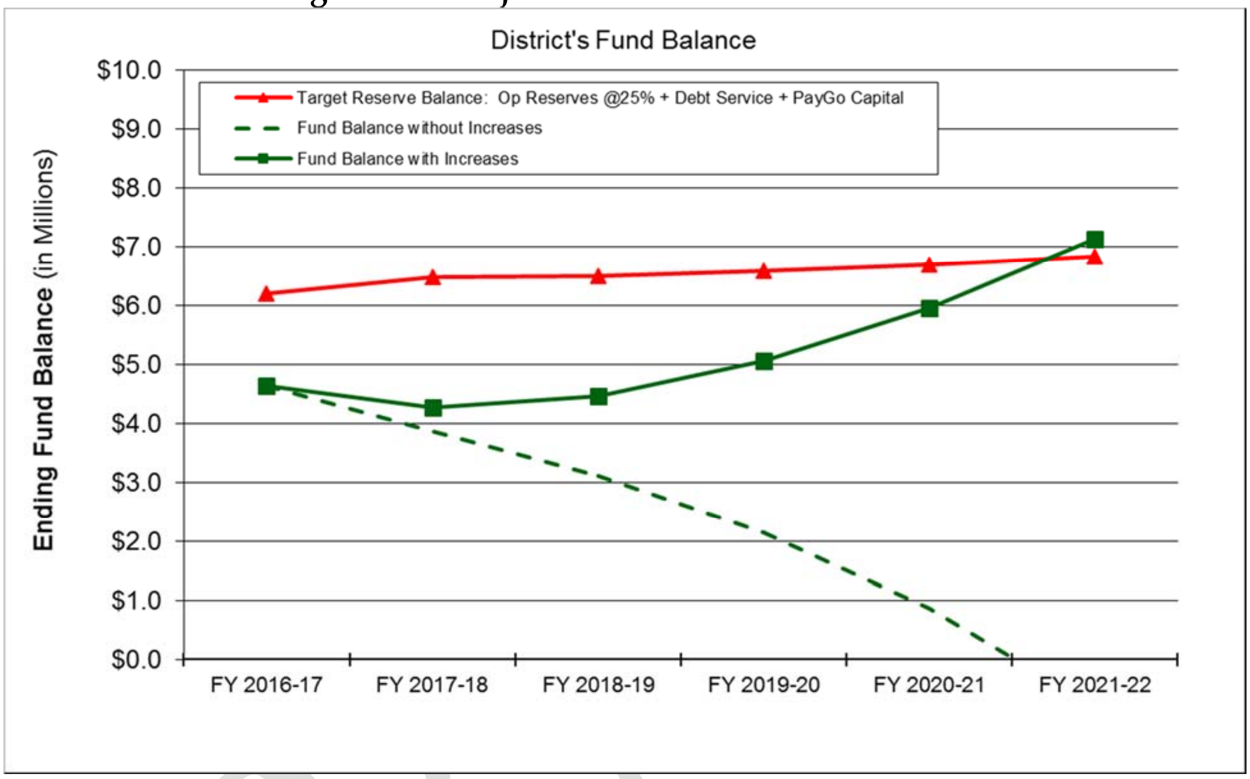
| | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
|---|---|---|---|---|---|
| Revenue Requirement | $12,609,223 | $12,724,731 | $13,039,429 | $13,504,234 | $14,017,380 |
| Non-Operating Revenue | ($1,377,174) | ($1,420,690) | ($1,465,620) | ($1,512,014) | ($1,559,922) |
| Net Revenue Requirement | $11,232,048 | $11,304,042 | $11,573,809 | $11,992,220 | $12,457,459 |
| Revenue from Current Rates [1] | $10,459,030 | $10,540,353 | $10,622,489 | $10,705,447 | $10,789,234 |
| Surplus/(Deficit) without Rate Increase | ($773,018) | ($763,689) | ($951,320) | ($1,286,773) | ($1,668,225) |
| EOY Fund Balance (before increase) | $3,867,498 | $3,103,809 | $2,152,490 | $865,716 | ($802,509) |
| Revenue Increase | 3.9% | 5.0% | 5.0% | 5.0% | 5.0% |
| Revenue from Increases | $406,614 | $958,232 | $1,546,108 | $2,172,416 | $2,839,458 |
| Surplus/(Deficit) with Rate Increase | ($366,404) | $194,543 | $594,788 | $885,643 | $1,171,232 |
| *Transfer to/(from) Reserves* | | | | | |
| EOY Fund Balance (after increase) | $4,274,112 | $4,468,656 | $5,063,444 | $5,949,086 | $7,120,319 |
| *Target EOY Fund Balance* | *$6,204,618* | *$6,475,328* | *$6,503,520* | *$6,580,458* | *$6,696,211* |

[1] Includes projected annual 1% rebound in water consumption by current customers (beginning FY 2018/19)

**Figure 2-4** shows the combined fund balance for the Operating, Capital, and Debt Service Reserves compared with the target balance. The line labeled "Total Target Balance" (diamond symbols) is the sum of the target balances for the Operating, Capital, and Debt Service Reserves. The dashed green line shows what the fund balance would be without rate increases. The fund balance drops quickly and would be negative by FY 2021-22.

**Figure 2-4** shows the fund balance (solid green line with square symbols) compared with the target balance. **Figure 2-4** indicates that the fund balance achieves the target balance by FY 2021-22, with the projected revenue increases.

**Figure 2-4. Projected Fund Balance at Year End**



# SECTION 3. RATE MODIFICATIONS AND BILL IMPACTS

## 3.1 Current Rates

The District's rate payers pay the sum of two charges for water service on a bi-monthly or monthly basis: a base service charge based on the size of the service connection plus a quantity charge based on metered water use during the billing period. The current rates are summarized in **Figure 3-1**.

**Figure 3-1. Current Base Service and Quantity Charges**

| Base Service Charge | | |
|---|---|---|
| | Bi-Monthly | Monthly |
| Meter Size | | |
| 5/8" | $52.20 | $26.10 |
| 5/8" for 2 dwelling units | $104.39 | $52.20 |
| 3/4" | $78.45 | $39.23 |
| 3/4 inch for 2 dwelling units | $156.89 | $78.45 |
| 1" | $130.76 | $65.38 |
| 1.5" | $252.52 | $126.26 |
| 2" | $418.48 | $209.24 |
| 3" | $915.50 | $457.75 |
| 4" | $3,139.22 | $1,569.61 |

| Quantity Charge | | | | |
|---|---|---|---|---|
| | Bi-Monthly | | Monthly | |
| | HCF | $/HCF | HCF | $/HCF |
| Residential | | | | |
| Tier 1 | 1 to 4 | $9.19 | 1 to 2 | $9.19 |
| Tier 2 | 5 to 16 | $10.26 | 3 to 8 | $10.26 |
| Tier 3 | 17 to 30 | $13.23 | 9 to 15 | $13.23 |
| Tier 4 | Over 30 | $17.53 | Over 15 | $17.53 |
| Non-Residential | per HCF | $11.31 | per HCF | $11.31 |

The base service charges are the same regardless of customer class. In other words, the base service charge for a meter of a given size is the same for all meters of that size regardless of which class of customer is served. The residential quantity charges are tiered and the non-residential quantity charge is a uniform, un-tiered rate.

Residential customers pay tiered consumption charges, also referred to as "increasing block rates." The current residential increasing block rates comprise four tiers. Residential customers pay rates for successive ranges of consumption (tier or block). The rate in each tier increases as consumption increases in proportion to the increasing cost of serving higher levels of demand, which place burdens on the capacity of the infrastructure as well as on the sources of supply. The total quantity charge is the sum of the consumption in each tier multiplied times the corresponding rate in each tier.

## 3.2 Rate Structure Modifications

In 2015, HF&H assisted the District in updating its rate structure by performing a cost-of-service analysis to ensure that its rates allocated costs to each customer class in proportion to each class' demand on the District's facilities. Within the residential class, the quantity charges were restructured to conform to the cost of providing service across the tiers.

This realignment should remain accurate for several years unless there are significant changes in the relative demands among customer classes or residential tiers, or changes in significant costs.

A review of the District's actual water use by customer class over the past couple years does not indicate a significant change; therefore, we do not recommend modifying the rate structure at this time.

The percentage increases that are recommended this year shall be applied equally, across-the-board to all meter sizes for the base service charges and applied equally, across-the-board to the quantity charges.

## 3.3 Proposed FY 2017-18 Rates (effective July 1, 2017)

As shown in **Figure 2-4**, to maintain the District's current reserve balance, revenues need to increase 7.3%, effective July 1, 2017. Though the District's reserve balance is not currently at the recommended target level, there are reserves available to increase revenues by 3.9% in FY 2017-18, instead of 7.3%.

The 3.9% increase in revenue can be achieved with a 5% increase in both residential and non-residential quantity charges and no increase in the base charges. Holding the base service charge at the current level benefits all customers regardless of class. The District can hold its base charges where they currently are and remain compliant with Proposition 218 because the resulting charge is proportionate to the cost of providing service. By not increasing the base service charge and only increasing the quantity charge, cost recovery from the fixed charges shifts slightly to the variable charges without disproportionate effect on customer bills because all customers are treated equally. The resulting bi-monthly and monthly rates for FY 2017-18, effective July 1, 2017, are shown in **Figure 3-2**.

**Figure 3-2. Current and Proposed Rates (eff. 7/1/2017)**

| Base Service Charge | | | | |
|---|---|---|---|---|
| | Bi-Monthly Billing | | Monthly Billing | |
| | Current | Proposed | Current | Proposed |
| Meter Size | | No Increase | | No Increase |
| 5/8" | $52.20 | $52.20 | $26.10 | $26.10 |
| 5/8" for 2 dwelling units | $104.39 | $104.39 | $52.20 | $52.20 |
| 3/4" | $78.45 | $78.45 | $39.23 | $39.23 |
| 3/4 inch for 2 dwelling units | $156.89 | $156.89 | $78.45 | $78.45 |
| 1" | $130.76 | $130.76 | $65.38 | $65.38 |
| 1.5" | $252.52 | $252.52 | $126.26 | $126.26 |
| 2" | $418.48 | $418.48 | $209.24 | $209.24 |
| 3" | $915.50 | $915.50 | $457.75 | $457.75 |
| 4" | $3,139.22 | $3,139.22 | $1,569.61 | $1,569.61 |

| Quantity Charge | | | | | | |
|---|---|---|---|---|---|---|
| | Bi-Monthly Billing | | | Monthly Billing | | |
| | HCF | Current | Proposed | HCF | Current | Proposed |
| Residential | | | 5% Increase | | | 5% Increase |
| Tier 1 | 1 to 4 | $9.19 | $9.65 | 1 to 2 | $9.19 | $9.65 |
| Tier 2 | 5 to 16 | $10.26 | $10.77 | 3 to 8 | $10.26 | $10.77 |
| Tier 3 | 17 to 30 | $13.23 | $13.89 | 9 to 15 | $13.23 | $13.89 |
| Tier 4 | Over 30 | $17.53 | $18.41 | Over 15 | $17.53 | $18.41 |
| Non-Residential | per HCF | $11.31 | $11.88 | per HCF | $11.31 | $11.88 |

## 3.4 Residential Bill Comparison

**Figure 3-3** compares the residential customer bills for the current and proposed rates across a range of consumption. The bills include both the base service charge (assuming a 5/8″ meter)[3] and the quantity charges. An average residential customer uses 10 HCF during a bi-monthly period. Comparing the current bill and proposed bill for using 10 HCF, shows the average bill will increase $4.90 for the bi-monthly period (or $2.45 per month).

[3] 96% of residential customers have a 5/8″ meter

# Figure 3-3. Residential Bill Comparison

| Tier | Water Use | | Bi-Monthly Bills (5/8" Service) | | $ Difference |
|---|---|---|---|---|---|
| | HCF/mo | Gal/Day | Current | Proposed 7/1/2017 | |
| Tier 1 | 0 | 0 | $52.20 | $52.20 | $0.00 |
| | 1 | 12 | $61.39 | $61.85 | $0.46 |
| | 2 | 25 | $70.58 | $71.50 | $0.92 |
| | 3 | 37 | $79.77 | $81.15 | $1.38 |
| | 4 | 50 | $88.96 | $90.80 | $1.84 |
| Tier 2 | 5 | 62 | $99.22 | $101.57 | $2.35 |
| | 6 | 75 | $109.48 | $112.34 | $2.86 |
| | 7 | 87 | $119.74 | $123.11 | $3.37 |
| | 8 | 100 | $130.00 | $133.88 | $3.88 |
| | 9 | 112 | $140.26 | $144.65 | $4.39 |
| | 10 | 125 | $150.52 | $155.42 | $4.90 |
| | 11 | 137 | $160.78 | $166.19 | $5.41 |
| | 12 | 150 | $171.04 | $176.96 | $5.92 |
| | 13 | 162 | $181.30 | $187.73 | $6.43 |
| | 14 | 175 | $191.56 | $198.50 | $6.94 |
| | 15 | 187 | $201.82 | $209.27 | $7.45 |
| | 16 | 199 | $212.08 | $220.04 | $7.96 |
| Tier 3 | 17 | 212 | $225.31 | $233.93 | $8.62 |
| | 18 | 224 | $238.54 | $247.82 | $9.28 |
| | 19 | 237 | $251.77 | $261.71 | $9.94 |
| | 20 | 249 | $265.00 | $275.60 | $10.60 |
| | 21 | 262 | $278.23 | $289.49 | $11.26 |
| | 22 | 274 | $291.46 | $303.38 | $11.92 |
| | 23 | 287 | $304.69 | $317.27 | $12.58 |
| | 24 | 299 | $317.92 | $331.16 | $13.24 |
| | 25 | 312 | $331.15 | $345.05 | $13.90 |
| | 26 | 324 | $344.38 | $358.94 | $14.56 |
| | 27 | 337 | $357.61 | $372.83 | $15.22 |
| | 28 | 349 | $370.84 | $386.72 | $15.88 |
| | 29 | 362 | $384.07 | $400.61 | $16.54 |
| | 30 | 374 | $397.30 | $414.50 | $17.20 |
| Tier 2 | 31 | 386 | $414.83 | $432.91 | $18.08 |
| | 32 | 399 | $432.36 | $451.32 | $18.96 |
| | 33 | 411 | $449.89 | $469.73 | $19.84 |
| | 34 | 424 | $467.42 | $488.14 | $20.72 |
| | 35 | 436 | $484.95 | $506.55 | $21.60 |
| | 36 | 449 | $502.48 | $524.96 | $22.48 |
| | 37 | 461 | $520.01 | $543.37 | $23.36 |
| | 38 | 474 | $537.54 | $561.78 | $24.24 |
| | 39 | 486 | $555.07 | $580.19 | $25.12 |
| | 40 | 499 | $572.60 | $598.60 | $26.00 |

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