

CITY OF YUBA CITY
STAFF REPORT

Date: March 1, 2016
To: Honorable Mayor & Members of the City Council
From: Public Works Department
Presentation by: Diana Langley, Public Works Director

Summary

Subject: Water and Wastewater Rate Study

Recommendation: Conduct a Public Hearing, accept comments related to the Water and Wastewater Rate Study, and direct staff to finalize the Rate Study.

Fiscal Impact: Three alternatives have been presented to the City Council for consideration:

- 2 Year Rate Plan (O&M + Debt Service)
- 5 Year Rate Plan – Option 1 (O&M + Debt Service + Priority 1 & 2 Projects)
- 5 Year Rate Plan – Option 2 (O&M + Debt Service + All Projects)

Purpose:

To address revenue needs in the Water and Wastewater Enterprise Funds.

Background:

The City's last water and wastewater rate studies were completed in 2011 and the proposed rates were adopted by Council in July, 2011, through the Proposition 218 process. The adopted rates provided for increases to the City's water and wastewater rates through FY 15/16.

In September, 2014, the City Council awarded a contract to NBS for the preparation of updated water and wastewater rate studies. With the historic drought in California, much has changed since 2011. Over the last few months, staff has worked with NBS to gather data, prepare a rate model, and evaluate alternatives to address revenue needs in the Water and Wastewater Enterprise Funds.

To present the information, two workshops were held on January 12 and February 9. The January 12 workshop focused on water and wastewater operational needs, condition of the water and wastewater systems, and major capital improvements required. The February 9 workshop focused on existing water and wastewater rates, three options to increase revenues, and review of the Proposition 218 process.

A brief summary of each workshop is provided below.

January 12, 2016 Workshop:

1. Operational Needs

The workshop highlighted the impact that California's historic drought has had on revenues in both the Water and Wastewater Funds, with the biggest impact on the Water Fund. Water sale revenues declined 3% in FY 13/14, 12% in FY 14/15, and 19% in the first 6 months of FY 15/16. Figure 1 shows water revenues received versus the water revenues anticipated under the 2011 approved rates.

The drought has also had an impact on the Wastewater Fund, primarily due to conservation within the commercial accounts as residential accounts are charged a flat rate. Figure 2 shows wastewater revenues received versus the wastewater revenues anticipated under the 2011 approved rates.

The City's bond covenants require that the City consider a rate increase in order to maintain the minimum 1.20 debt coverage ratio. With this significant fall in revenues, there is a need to consider both water and wastewater rate increases as it is anticipated that the debt service ratio will fall below the minimum required 1.20 threshold in the near future. In addition, with the debt coverage ratio approaching the 1.20 threshold, it becomes impossible to apply for potential low interest loans, which often become available in combination with grants. Potential grants also require local matching funds.

2. Condition of Infrastructure and Major Capital Improvements

The condition of the Water Treatment Plant (WTP), water distribution system, Wastewater Treatment Facility (WWTF), and sewer collection system were also presented and discussed.

Water:

The WTP was placed in to operation in 1969 and is in need of major improvements. Table 1 highlights priority capital improvement projects at the WTP.

Table 1: Priority Projects at the Water Treatment Plant

| Project | Estimated Cost | Priority |
|---|----------------|----------|
| Electrical & Instrumentation Improvements | \$1,000,000 | 1 |
| Aquifer Storage Recovery/Second Well | \$4,600,000 | 1 |
| Fluoride System Replacement | \$200,000 | 1 |
| Security Improvements | \$75,000 | 1 |
| Carbon Feed System Replacement | \$500,000 | 2 |
| Backwash Recovery | \$1,000,000 | 3 |
| Sedimentation/Floc Basin Rehabilitation | \$1,800,000 | 3 |
| Groundwater Well Abandonments | \$400,000 | 4 |
| Total: | \$9,575,000 | |

In addition, the water distribution system is comprised of water lines that are nearly 100 years old and in need of replacement, water meters that are nearing the end of their service life, and water storage reservoirs in need of recoating. Table 2 highlights priority capital improvement projects in the water distribution system.

Table 2: Priority projects in the water distribution system

| Project | Estimated Cost | Priority |
|-------------------------------------|------------------|----------|
| Recoating Water Storage Reservoirs | \$400,000 Annual | 1 |
| Replacement of Water Mains* | \$27,400,000 | 1 |
| Replace Water Services/Water Meters | \$700,000 Annual | 1 |

*Note: It is not expected to replace the water mains all at once. Historically, the City has programmed a nominal amount of funds on an annual basis for repair and replacement of water mains.

Wastewater:

The WWTF was placed into operation in 1972 and also is in need of major improvements. Table 3 highlights priority capital improvement projects at the WWTF.

Table 3: Priority Projects at the Wastewater Treatment Facility

| Project | Estimated Cost | Priority |
|---|----------------|----------|
| Digester Improvements | \$3,300,000 | 1 |
| Secondary Clarifier No. 4 | \$5,500,000 | 1 |
| West Chlorine Contact Basin Rehabilitation | \$650,000 | 1 |
| New Outfall Diffuser | \$11,500,000 | 1 |
| Advanced Treatment & Water Recycling Opportunities Evaluation | \$270,000 | 1 |
| Barscreen Rehabilitation/Replacement | \$1,200,000 | 2 |
| Dewatering System Improvements | \$3,550,000 | 2 |
| Electrical & Instrumentation Improvements | \$1,000,000 | 2 |
| Oxygen Generation Improvements | \$4,000,000 | 3 |
| Disinfection System Evaluation & Replacement | \$3,150,000 | 3 |
| New Septage Receiving Facility | \$1,650,000 | 3 |
| Secondary Clarifier Improvements | \$980,000 | 3 |
| New Co-Generation System | \$2,800,000 | 3 |
| Grit Removal Facility | \$4,000,000 | 4 |
| Total: | \$43,550,000 | |

In addition, the sewer collection system is comprised of sewer lines that are nearly 100 years old and in need of rehabilitation and/or replacement. Table 4 highlights priority capital improvement projects in the sewer collection system.

Table 4: Priority projects in the sewer collection system

| Project | Estimated Cost | Priority |
|--|------------------|----------|
| Replacement/Rehabilitation of Sewer Lines* | \$33,000,000 | 1 |
| Lift Station Improvements | \$150,000 Annual | 1 |

*Note: It is not expected to replace the sewer lines all at once. Historically, the City has programmed a nominal amount of funds on an annual basis for repair and replacement of sewer lines.

February 9, 2016 Workshop

1. Existing Water and Wastewater Rates

As noted above, the existing rates were approved through a rate study and Proposition 218 process in 2011. The rates have increased annually beginning September 1, 2011, with the final increase going into effect September 1, 2015. Prior to that, the water and wastewater rates had not increased in four and three years, respectively.

2. Three Options to Increase Revenues

To address the decline in revenues, staff presented three rate options for Council consideration. Those options are as follows:

- 2-Year Rate Plan
 - Operation & Maintenance (O&M) Expenses + Debt Service
- 5-Year Rate Plan
 - Option 1: O&M Expenses + Debt Service + Priority 1 & 2 Projects
 - Option 2: O&M Expenses + Debt Service + All Projects noted above

Even though the replacement of water mains and sewer lines are categorized as Priority 1 projects, staff is not proposing to fund the entirety of those projects through the proposed rate increases at this time. The rate study assumes that a nominal amount will continue to be budgeted on an annual basis for these projects.

Figures 3 – 5 provide the funding allocation over time for the proposed water rate increase options noted above. In addition, Figures 6 and 7 provide a comparison of the proposed rate options over five years for an average residential account on a 1” water meter and an average commercial account on a 2” water meter.

Figures 8 – 10 provide the funding allocation over time for the proposed wastewater rate increase options noted above. Figures 11 and 12 provide a comparison of the proposed rate options over five years for a single family residential account and an average C1 commercial customer.

In addition, staff is proposing to reduce the baseline allocation for water by 33%. For instance, a 1” water meter currently has a baseline allocation of 15 hundred cubic feet (HCF) that is included in the monthly rate. With the proposal, the baseline allocation would be reduced to 10 HCF. This is in line with the mandate from the State for the City to reduce water consumption by 29% and it supports the City’s efforts to reduce overall water consumption by 20% by 2020.

3. Review of Proposition 218 Process

The purpose of Proposition 218 is to ensure that all taxes and most charges on property owners are subject to voter approval, including water and wastewater rate increases. The process requires that the City Council approve “Guidelines for the Submission and Tabulation of Protests”, mail a Notice of Public Hearing for proposed water and wastewater rate increases to property owners and customers at least 45 days prior to the protest hearing, conduct a protest hearing, and then tabulate the protests. A rate increase is approved if written protests do not exceed 50% of the property owners or customers.

The presentations for both workshops can be found on the City’s website at www.yubacity.net.

Analysis:

The current state of the Water and Wastewater Enterprise Funds is such that the City needs to proceed with the Proposition 218 process to increase rates in order to increase revenues. At a minimum, the revenues need to be increased sufficiently to ensure that the City can cover operation and maintenance costs and meet the required debt coverage ratio of 1.20.

The 2 Year Rate Plan achieves this objective. However, staff will likely return to Council within two years to recommend additional rate increases as the major improvements noted above cannot be continuously deferred. At that time, the recommended rate increases could be higher than those proposed as part of the 5 Year Rate Plans today. In addition, the 2 Year Rate plan does not provide

any local matching funds for potential grants. It is important to note that as a result of the 2011 approved rates, the City was able to receive \$6 Million in grants (in the form of principal forgiveness to a loan) for the Wastewater Fund.

Staff recommends proceeding with one of the 5-Year Rate Plans noted above. Both plans provide for operation and maintenance costs, debt service payments, and modest capital improvement projects. If the drought ends, and water consumption increases, then the recommended rate increases could be re-evaluated. At Council's direction, staff can report on an annual basis the status of the Water and Wastewater Funds along with a recommendation as to the rate increase that should be implemented for the following year, provided that the recommended rate increase does not exceed the rates approved through the Proposition 218 process.

Once Council selects a rate option, staff will finalize the Rate Study Report, and bring forward the necessary documents to start the Proposition 218 process. It is anticipated that once the Proposition 218 process begins, new rates would not go into effect until approximately 4-5 months later.

Fiscal Impact:

The fiscal impact of the three proposed rate options is noted above and is graphically shown in Figures 3 – 5 for the Water Fund and Figures 8 – 10 for the Wastewater Fund. Examples of the fiscal impact to customers associated with each rate option are shown in Figures 6 and 7 for water and Figures 11 and 12 for wastewater.

Alternatives:

Council can direct staff to consider an alternative rate option.

Recommendation:

Conduct a public hearing, accept comments related to the Water and Wastewater Rate Study, and direct staff to finalize the Rate Study.

Prepared by:

Submitted by:

/s/ Diana Langley

/s/Steven C. Kroeger

Diana Langley
Public Works Director

Steven C. Kroeger
City Manager

Reviewed by:

Finance

RB

City Attorney

TH (via email)

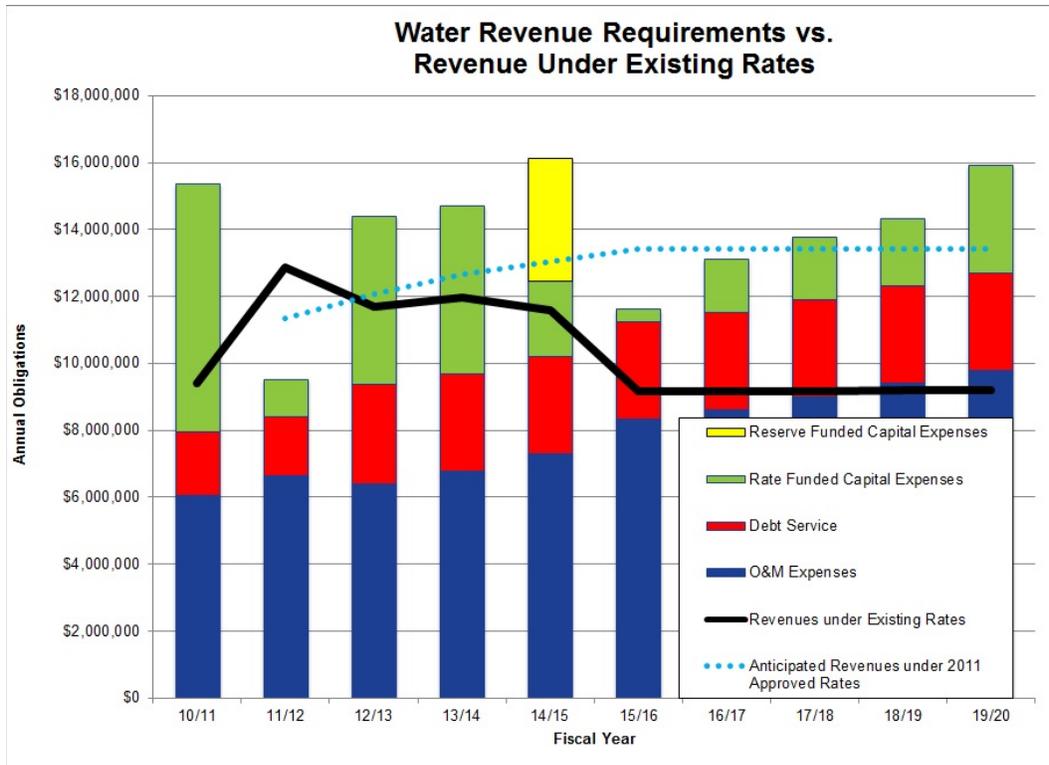


Figure 1: Comparison of Water Revenues Received to Anticipated Revenues Under 2011 Approved Rates

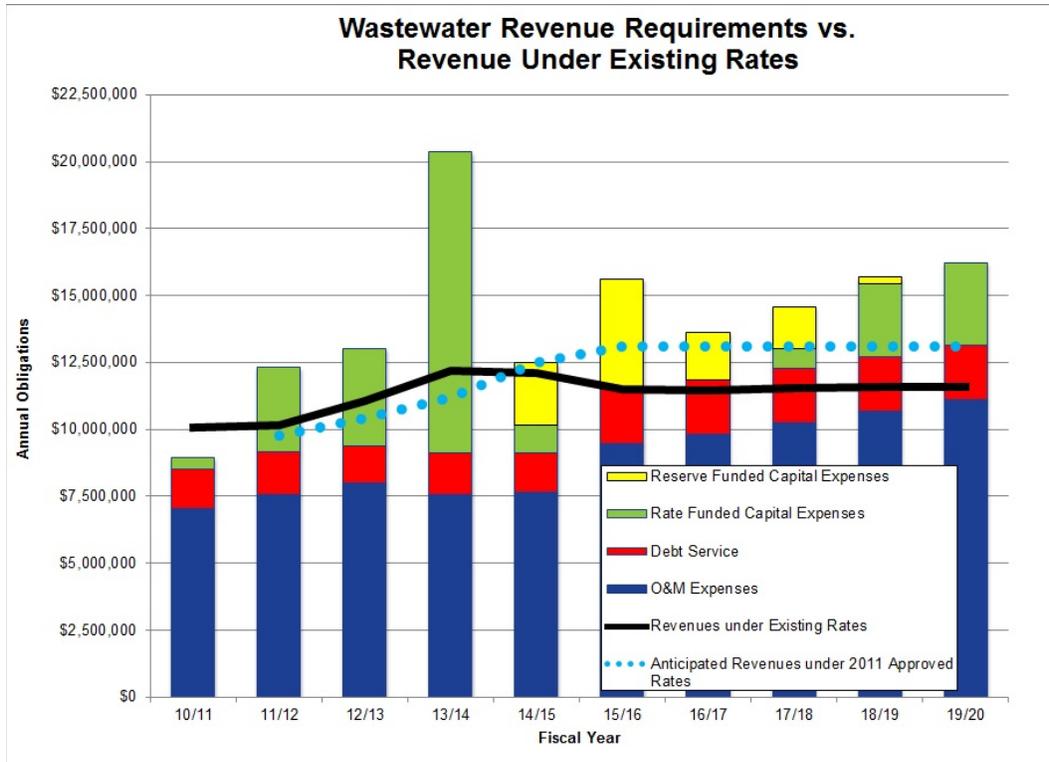


Figure 2: Comparison of Wastewater Revenues Received to Anticipated Revenues Under 2011 Approved Rates

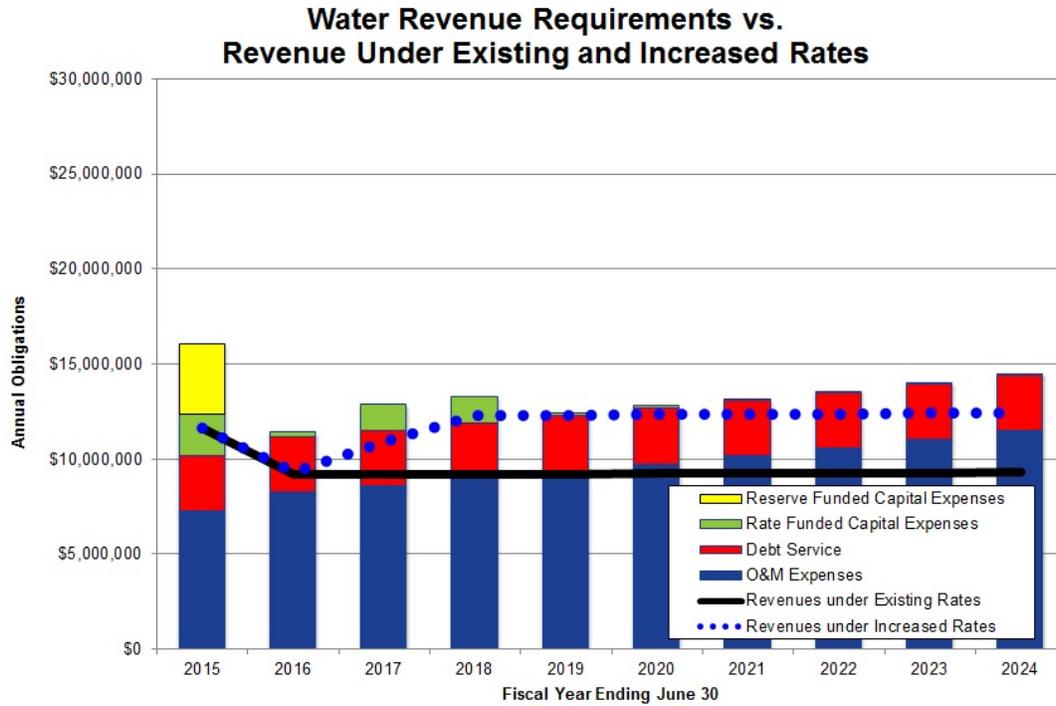


Figure 3: Water Revenues – 2 Year Rate Plan

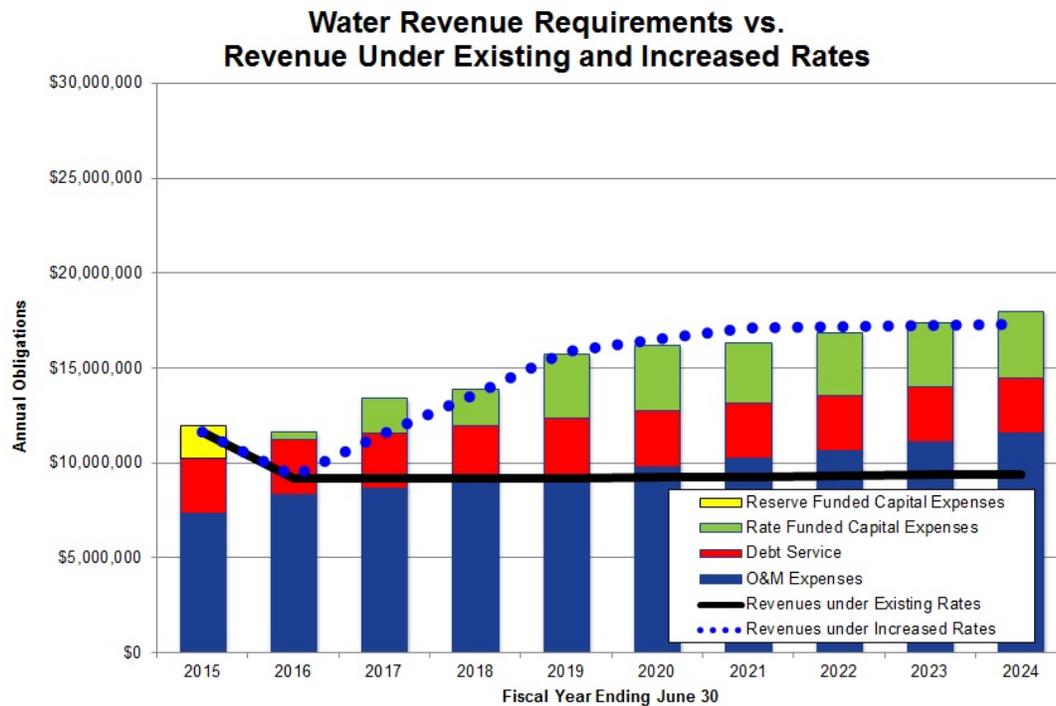


Figure 4: Water Revenues – 5 Year Rate Plan – Option 1

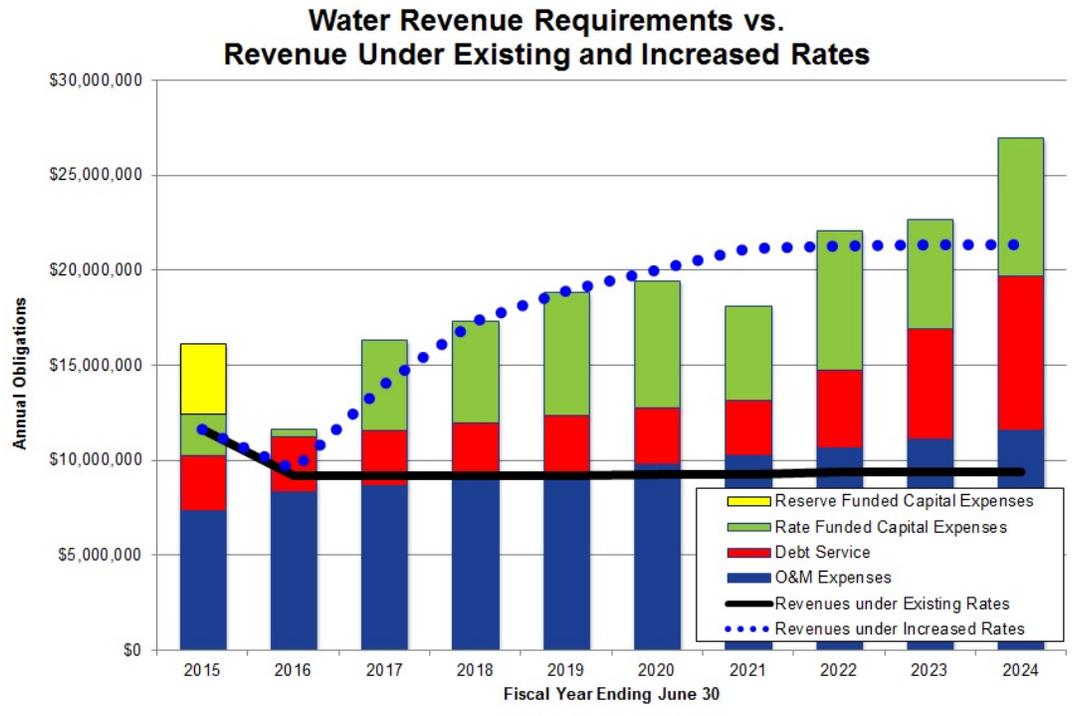


Figure 5: Water Revenues – 5 Year Rate Plan – Option 2

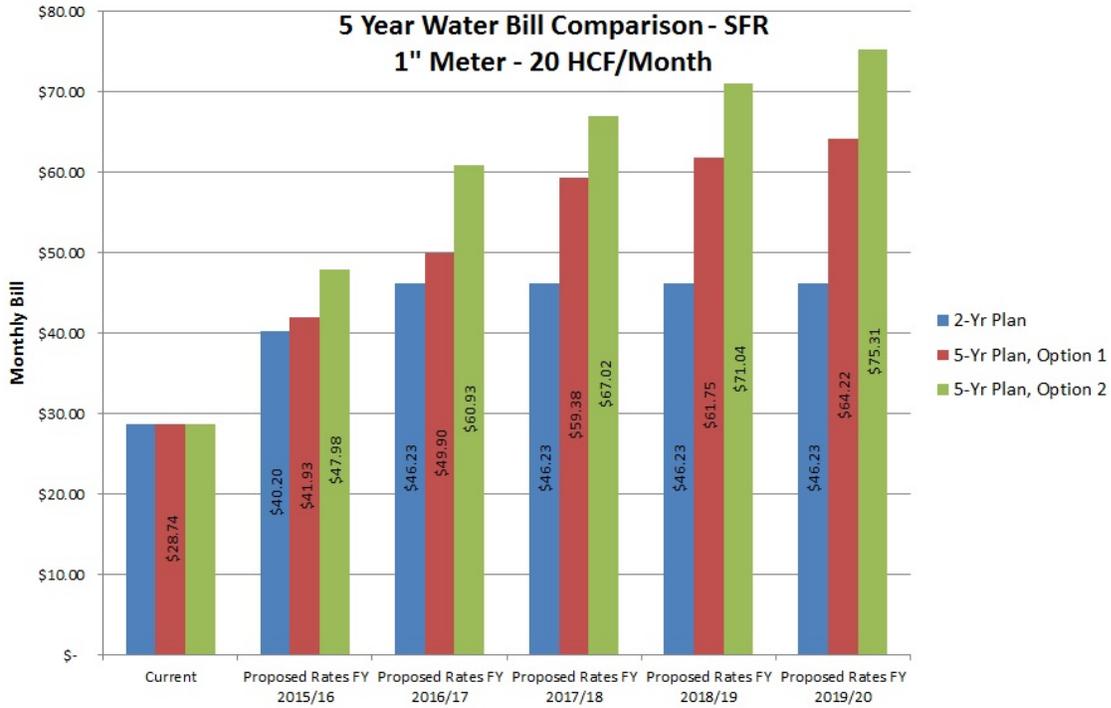


Figure 6: Summary of Water Rate Options – Average 1” Single Family Residential Account

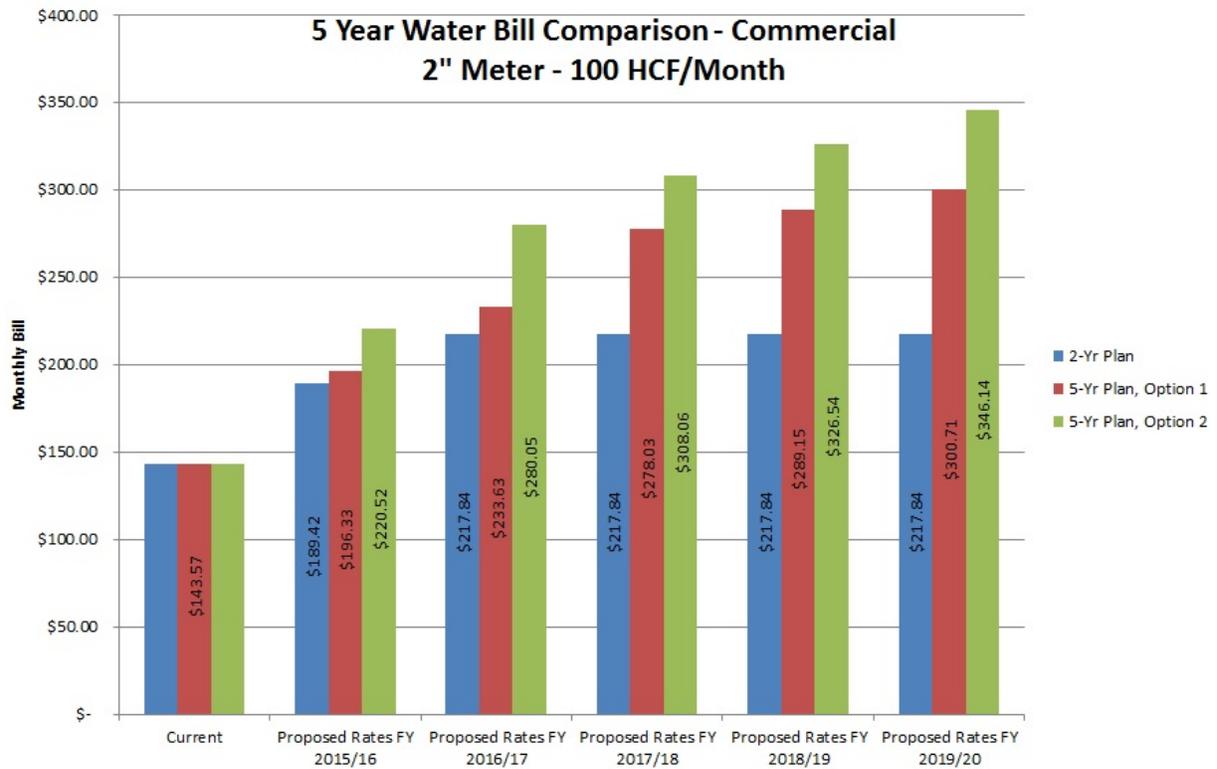


Figure 7: Summary of Water Rate Options – Average 2” Commercial Account

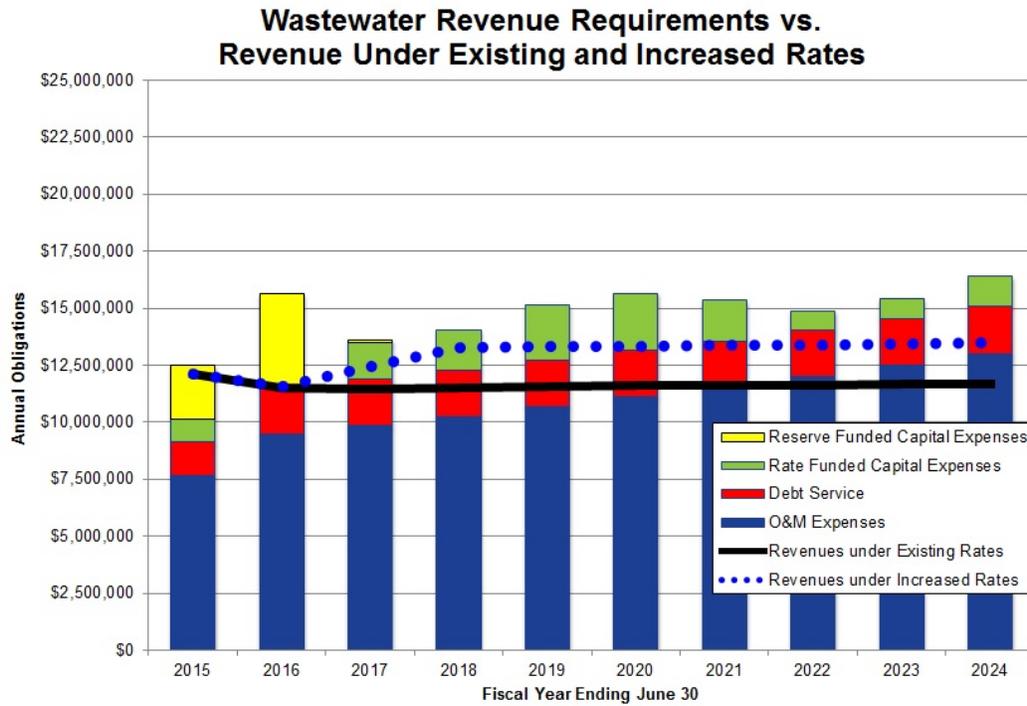


Figure 8: Wastewater Revenues – 2 Year Rate Plan

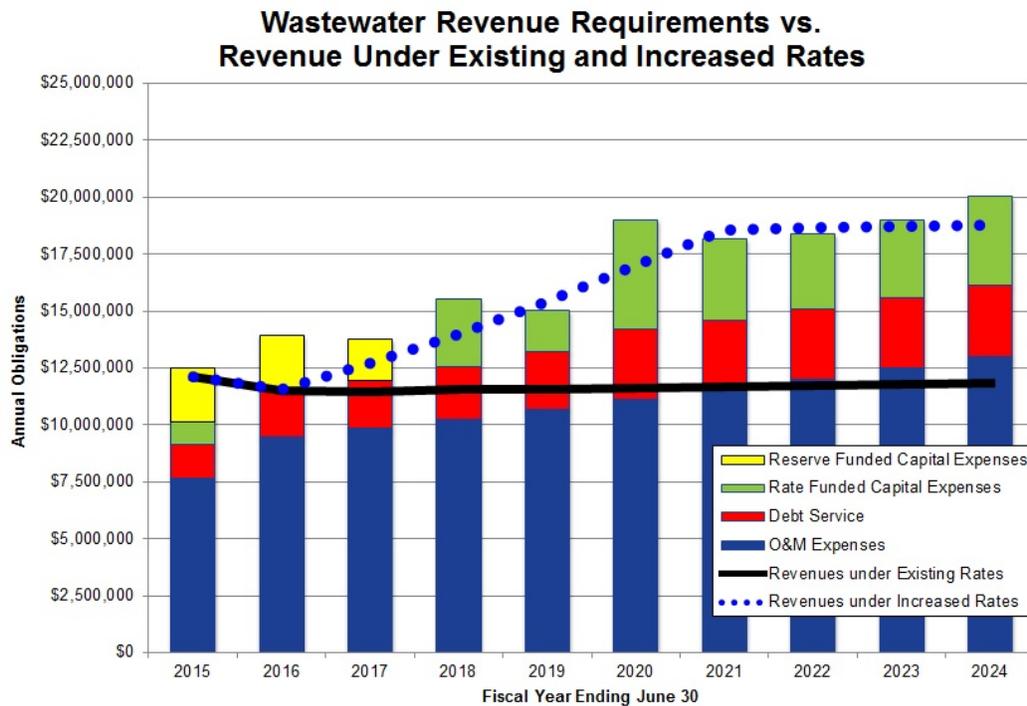


Figure 9: Wastewater Revenues – 5 Year Rate Plan – Option 1

Wastewater Revenue Requirements vs. Revenue Under Existing and Increased Rates

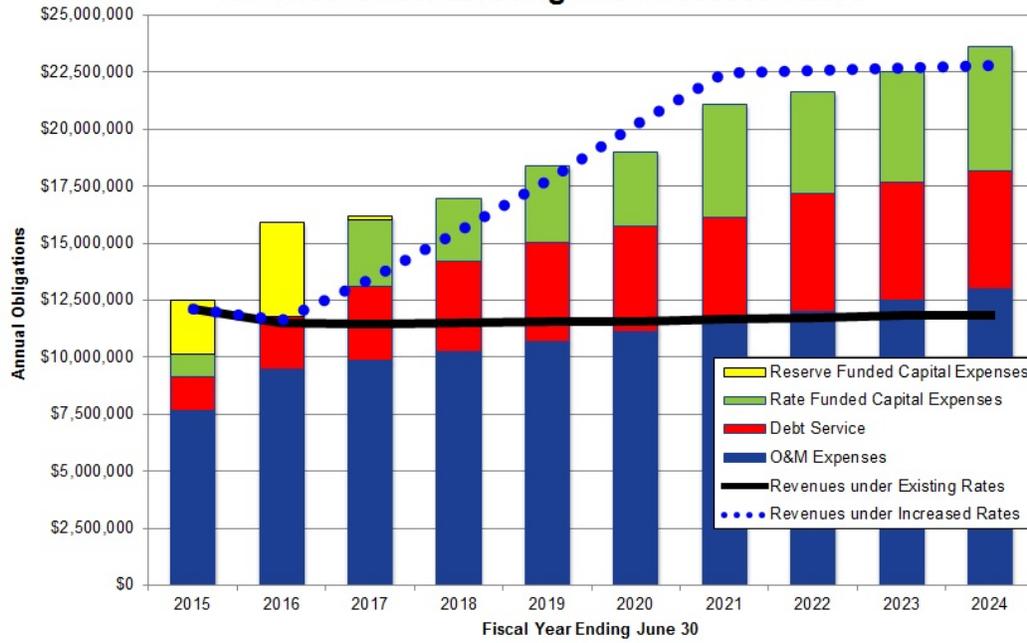


Figure 10: Wastewater Revenues - 5 Year Rate Plan – Option 2

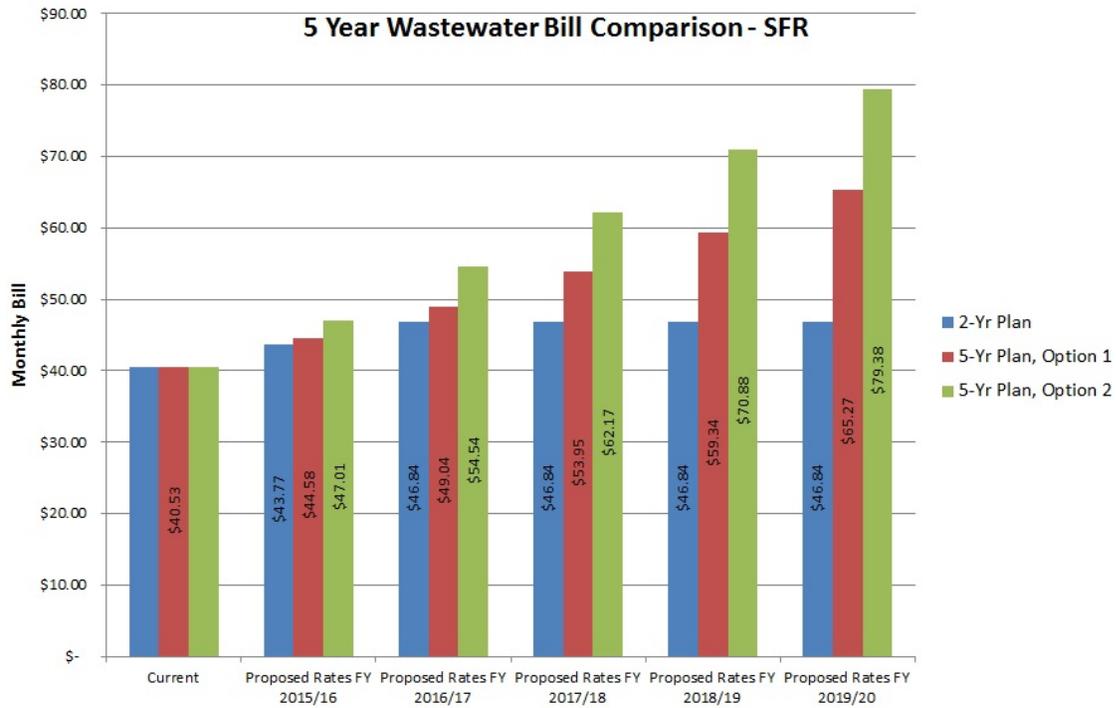


Figure 11: Summary of Wastewater Rate Options – Single Family Residential Account

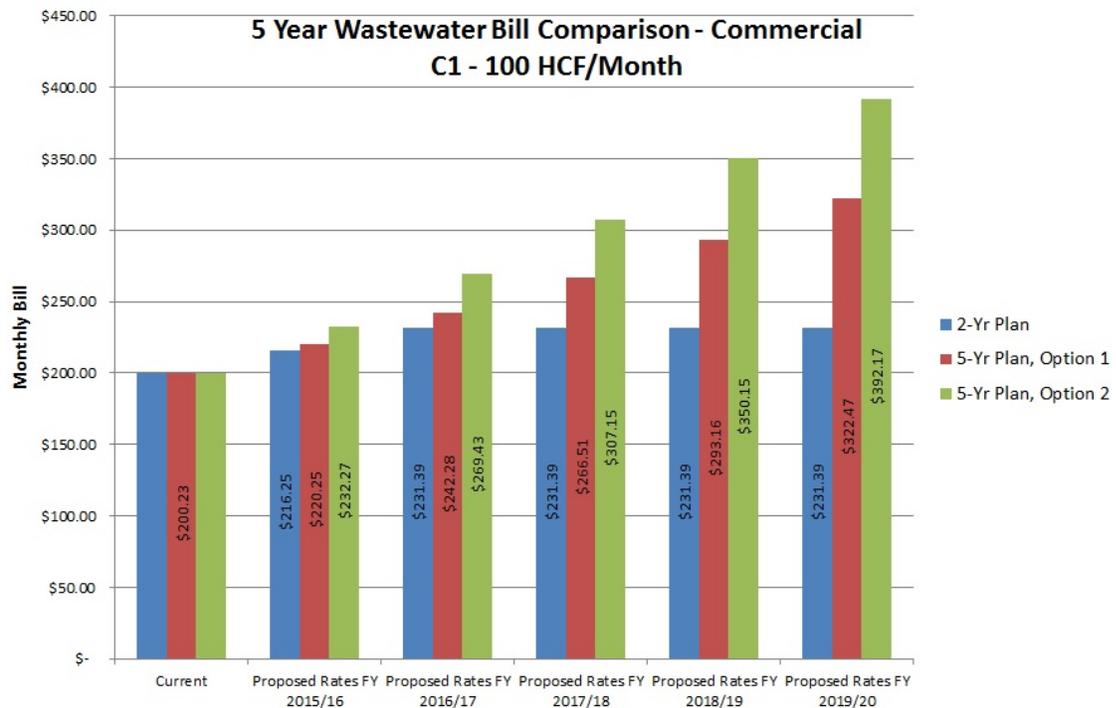


Figure 12: Summary of Wastewater Rate Options – Average Commercial Account