



## CITY COUNCIL AGENDA REPORT

**Meeting Date:** 4/20/2023

**From:** Carolina Yuen, Finance Director

**Subject:** Continued Public Hearing for the Proposed Water and Sewer

### Rate Increases

#### **Community Goal/Result**

Fiscally Prudent

Safe Community

Ecological Sustainability

#### **Purpose**

Ensure the City's water and sewer rates reflect the full cost of providing clean drinking water and safe and effective conveyance of wastewater to the treatment plant while encouraging conservation of resources.

#### **Recommendation**

Adopt Resolution approving the proposed rates in Attachment A including:

- (a) an annual increase of 9% through 2026/2027 in the water fixed charge,
- (b) an annual increase of 7% annually through 2027/2028 in the water usage rate, and
- (c) a 25% annual increase through 2027/2028 in sewer charges,

and setting the discount rate for the City's Low Income Rate Assistance (LIRA) Plan to a fixed rate across all services, starting at 25%, and finding that no further environmental review is required because water and sewer rates is not considered a project under the California Environmental Quality Act (CEQA). CEQA Guidelines, Section 15378(b)(2) and (b)(4).

#### **Background**

In 2001, Ordinance No. 458 was enacted to set the process for determining future water and sewer rate increases, and recommended that all cost increases from San Francisco be passed onto customers.

The last operational rate increase went into effect in 2012 based on a rate study performed in 2000. The City has been working from this rate study for the last twenty years.

Since 2012, the cost of the City's water purchases have increased significantly, along with the cost of wastewater treatment. The City has been able to keep operation rates constant due to an increase in usage among users over this period and the use of one-time revenue sources (i.e., connection fees).

In April 2021 the City retained the firm Lechowicz and Tseng to review the City's operation water and sewer rates. The City Council Infrastructure Subcommittee worked with Lechowicz

and Tseng to develop the proposed rate increases and suggested rate increases were presented at the City Council meeting held on December 15, 2022. Council selected the rate option under consideration at this meeting and directed staff to proceed with the requirements of Proposition 218 in order for the Council to consider adopting the rate increases at a future public hearing at least 45 days after written notification to property owners and account holders for community input.

On April 3, 2023, a public hearing was held to discuss the proposed increases to the water and sewer rates. The school district within the City was on spring break and other religious holidays were being observed the week of the initial public hearing. The Council wanted to provide residents and property owners an additional opportunity to express their views and ask questions, and therefore continued the public hearing to April 20, 2023.

## **Discussion**

### Water and Sewer Rates

Water and sewer rates are collected to pay for the operations of the water and sewer systems. Following are the various line items on the City's bi-monthly water and sewer bill:

- Water Service Charge – The fixed charge for having a meter connected to the system and for the City to ensure that it has enough treated water available to provide the full capacity of that meter and all other meters at a given time.
- Water Usage Charge – This charge is based on the number of units used during the billing period (two months). 1 unit = 100 cubic feet of water = approximately 748 gallons.
- Sewer Charge – For residential customers, the rate of this charge is reset every April based on the average water usage from October through January. For commercial customers, this charge is based on the actual water used during the billing period.
- Capital Project Charge – Where some agencies pay for capital projects using operating rates, the City adopted this charge to pay for debt service for bonds funding capital projects and major improvements to the water and sewer system. This charge is not part of the proposed increases herein.
- Drought Contingency Fund Charge – Where other agencies traditionally have raised rates during droughts to combat lower water usage, the City adopted this charge to create a reserve fund to cover loss of revenue during drought years. Approximately 70% of the City's costs are fixed but 70% of revenue is currently dependent on water usage. Water conservation efforts may therefore decrease revenues to levels that would not cover the related costs. This charge is not part of the proposed increases herein.

Since 2012, the cost of the City's water purchases has increased from \$2.69 per unit to \$4.50 per unit, an increase of 67%. Wastewater treatment has gone from \$4.81 per unit to \$11.63 per unit, an increase of 142%. The City has been able to keep operation rates constant due to

an increase in usage among users and the use of one-time revenue sources (i.e., connection fees).

At the April 6, 2023 public hearing, Councilmember Lentz inquired what the connection fees were over the years. Following is a table reflecting the one-time connection fees collected over the past five fiscal years that helped alleviate the increase in costs:

| <b>Connection Fees</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> |
|------------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Water</b>           | \$619,207   | \$68,663    | \$137,442   | \$27,836    | \$14,543    |
| <b>Sewer</b>           | \$1,409,363 | \$123,706   | \$8,022     | \$8,655     | \$6,776     |

Lechowicz and Tseng reviewed the City’s Water Service Charge, Water Usage, and Sewer Charge, analyzing the City’s rates, customer usage and revenue produced from the rates. Their analysis confirmed that for FY2021 and FY2022, the City’s Utility Fund was operating at a loss and using fund balance to cover these losses. A Utility Fund should be self-funding and able to operate at least at a break-even or a net-positive position. Sales Taxes, Property Taxes, Business Licenses and other service fees are funding sources for the General Fund, not the City’s Utility Fund.

There were two main reasons the Utility Fund operated at a net loss over the past two years. First, a decrease in water usage among our commercial accounts resulted from business closures in response to the COVID-19 pandemic. Simultaneously, the cost of wastewater treatment increased by 60% over the same period.

City Council and staff were aware of the decreasing revenues but decided not to propose rate increases during the pandemic to prevent additional hardship to its customers. This has resulted in a decrease in net revenues (revenues less operating expenses) to levels below the City’s debt coverage requirement of 1.25 times the annual debt service. Due to this, our credit rating for our utility bond was lowered from “AA-“ to “A” which makes it challenging to obtain future debt to fund the Capital Improvement Plan.

As discussed at the December 15, 2022 City Council meeting and April 6, 2023 public hearing, the objectives for the proposed increases are for the City to:

- (a) resume meeting its debt coverage requirement,
- (b) replenish its reserves to 25% of operating expenses (industry standard), and
- (c) for total revenues to cover total expenses of operating the system.

The City’s consultant proposed to increase the base charge for water service, moving the City away from a variable rate for water usage to a more fixed position so that revenues will not be as impacted by reduced water usage in the future. The proposed water rate changes would in the first year increase the fixed charges based on meter size, from a range of \$22.67 to \$431.30,

to a range of \$33.35 to \$448.19. After the first year, the fixed charges would increase annually 9% through 2026/2027.

In addition, the proposal is to also reduce the number of water usage tiers for variable consumption charges from six tiers to two. State law over the past 20 years has been interpreted by the courts to be stricter on the use of tier rates as tiering tends to benefit persons who use less water, and therefore pay less, thereby causing others to subsidize the cost of the overall system. As a result of this proposed change, proposed rates in the first year will range from \$6.30 to \$12.65 depending on water usage. Thereafter the rates will increase an additional 7% each year through 2027/2028.

Since the cost of wastewater treatment has increased significantly over the years, the need for a sewer rate increase is greater. Significantly, the proposed sewer rate changes will reduce the fixed charge in the first year from a range of \$68.87 to \$183.27 to one rate of \$64.20 but there would be an increase of 25% each year thereafter through 2027/2028.

The proposed sewer rate variable charge is to reduce the number of tiers to one tier and sewer rates will be based on “customer strength,” (for example residential or commercial), instead of usage. The rates will increase from a range of \$2.81 to \$7.66 to one rate at \$8.29 per unit and increase 25% each year thereafter through 2027/2028. The sewer bill for a residential customer who uses 10 units of water per billing cycle (every two months) would increase from \$106.67 to \$147.10 (an increase from \$640.02 to \$882.60 annually).

Because of the bi-monthly billing, the City does not intend to increase the rates until June 15<sup>th</sup>, 2023, where new rates will be reflected in the June – August bill, which will be due in October.

#### Low Income Rate Assistance Program

The City offers all users who are enrolled in the PG&E Care program to enroll in the City’s Low Income Rate Assistance (LIRA) Program. Over the years, the percentage reduction in rates has increased as the Council determined it did not want to increase water and sewer rates on low-income individuals. However, there is no LIRA reduction for either the Capital Charge or the Drought Contingency Fund Charge because these rates have been determined to raise an absolute dollar amount. According to State Law, some users cannot offset the cost for other users, and therefore the decrease in revenue due to the LIRA program is funded by the City’s General Fund. Over the last five years, the City has spent approximately \$40,000 each year from the General Fund for the LIRA program.

Following are the LIRA discounts by service.

| Service       | Current LIRA Discount | Proposed LIRA Discount                                |
|---------------|-----------------------|---|
| Water Service | 36.75%                | One rate for all services<br>Proposed at 25% to start |
| Water Use     | 49.90%                |   |
| Sewer         | 42.40%                |   |

If the City Council wishes to allocate the same dollar amount (\$40,000) in the future, the consultants proposed a flat discount of 25% on these users' bill to accomplish this. Staff recommends setting a flat discount rate for the bill instead of different rates for each type of service. If the Council wishes to allocate additional General Fund dollars to the LIRA program, it may increase the rate of the discount. However, the annual increases in water and sewer rates should be considered in correlation to any change in the discount percentage.

At the April 6 public hearing, Councilmember Lentz inquired on how the rate increases and LIRA discount change would impact a typical LIRA participant. Following are samples:

| Sample usage for # of Persons in Household / income level | Current Bill   | Proposed Rates - effective June 15, 2023   |
|---|--|--|
| 4 units<br><br>1-2 persons / \$36,620                     | Water Charge - \$22.67 - \$8.33<br>Water Usage - \$14.80 - \$7.39<br>Sewer Charge - \$80.11 - \$33.97<br>Drought Reserve -\$2.32<br>Capital Charge - \$40<br><br>Total bill = \$110.21<br>Annualized = \$661.26<br>1.8% of income        | Water Charge - \$33.35<br>Water Usage - \$18.90<br>Sewer Charge - \$97.36<br>Drought Reserve -\$2.32<br>Capital Charge - \$40<br>25% discount = (47.98)<br>Total bill = \$143.95<br>Annualized = 863.70<br>2.4% of income        |
| 10 units<br><br>4 persons / \$55,500                      | Water Charge - \$22.67 - \$8.33<br>Water Usage - \$60.18 - \$30.03<br>Sewer Charge - \$106.67 - \$45.23<br><br>Drought Reserve \$2.32<br>Capital Charge - \$70<br><br>Total bill = \$178.25<br>Annualized = \$1,069.50<br>1.9% of income | Water Charge-\$33.35<br>Water Usage - \$56.70<br>Sewer Charge - \$147.10<br><br>Drought Reserve -\$2.32<br>Capital Charge - \$70<br>25% discount = (77.37)<br>Total bill = \$232.10<br>Annualized = \$1,392.60<br>2.5% of income |

A LIRA customer's water and sewer bill for a household of two currently using 4 units represents 1.8% of their total income. The increase in rates in the first year would result in the

water and sewer bill representing 2.4% of their total income. The annual increase would be approximately \$202.

A LIRA customer’s water and sewer bill for a household of four currently using 10 units represents 1.9% of their total income. The increase in rates in the first year would result in the water and sewer bill representing 2.5% of their total income. The annual increase would be approximately \$323.

Proposition 218 Process

Staff mailed 2,791 letters dated February 17, 2023, to each Brisbane property owner and utility users, informing them about the proposed rate increase, details of the public hearing and instructions on how to submit a written protest and protest in person. As of this writing, 12 written protests have been received by the City Clerk. There are 2,184 parcels with connections to the City’s water and sewer systems. If more than 50% of the represented parcels protest the rate increases, the City will not be able to increase the rates. If there is no majority protest, Council may determine the amount of the increases and when the increases will be implemented. As mentioned, staff recommends the rate increases to go into effect June 15, 2023.

Frequently Asked Questions and additional information can be found on the City’s website at [brisbaneca.org/water-sewer-public-hearing](http://brisbaneca.org/water-sewer-public-hearing). Related information has also been distributed through weekly email blasts, the STAR, and the City’s social media channels.

**Fiscal Impact**

Following samples of billings based on usage reflect the cost to the customers:

| Sample Usage | Current Bill  | Proposed Rates - effective June 15, 2023   |
|--------------|---|--|
| 4 units      | Water Charge - \$22.67<br>Water Usage – \$14.80<br>Sewer Charge - \$80.11<br>Drought Reserve -\$2.32<br>Capital Charge - \$40 | Water Charge - \$33.35<br>Water Usage - \$18.90<br>Sewer Charge -\$97.36<br>Drought Reserve -\$2.32<br>Capital Charge - \$40 |
| 10 units     | Water Charge - \$22.67<br>Water Usage - \$60.18<br>Sewer Charge - \$106.67<br>Drought Reserve \$2.32<br>Capital Charge - \$70 | Water Charge-\$33.35<br>Water Usage - \$56.70<br>Sewer Charge - \$147.10<br>Drought Reserve -\$2.32<br>Capital Charge - \$70 |

Adopting the resolution would enable the City to cover the costs through revenues collected over five years, resume meeting its debt coverage requirement, and replenish its reserves to 25% of operating expenses.

### **Environmental Review**

Adoption of this resolution increasing water and sewer rates is not subject to further environmental review under the California Environment Quality Act (CEQA) because it is a governmental fiscal activity that does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment and/or it is general policy and procedure activity and hence, under either situation, not a “project,” CEQA Guidelines, Section 15378 (b)(2) and (4).

### **Measure of Success**

The City is able to provide clean, safe drinking water and effectively dispose of wastewater as economically as possible while being financially sustainable.



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Carolina Yuen, Finance Director



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Clay Holstine, City Manager

### Attachments:

Attachment A: Resolution 2023-\_\_\_\_ and rate tables with proposed increases

Attachment B: Water and Sewer Rate Study

Attachment C: City’s FAQs for the Water and Wastewater Rate Study

**RESOLUTION NO. 2023-\_\_\_\_\_****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE INCREASING THE CHARGES FOR WATER AND SEWER SERVICES AND SETTING THE DISCOUNT RATE FOR THE CITY'S LOW INCOME RATE ASSISTANCE PLAN AT 25% FOR ALL SERVICES**

**WHEREAS**, Subsection 13.12.020.C of the Brisbane Municipal Code states that it is the policy of the City to adjust water service charges to reflect increases in the cost of living and the cost of water supplied to the City by San Francisco; and

**WHEREAS**, Subsection 13.08.020.D of the Brisbane Municipal Code states that it is the policy of the City to adjust sewer service charges to reflect increases in the cost of living and the cost of sewer treatment services furnished to the City by San Francisco; and

**WHEREAS**, the City Council finds and determines that increases in the cost of providing water service and sewer services to customers in the City have made it necessary to increase the amounts charged by the City for providing such services; and

**WHEREAS**, proposed schedules of rate increases for water service and sewer services, each to be implemented over a five year period, were presented to the City Council, copies of which are attached hereto and incorporated herein by reference; and

**WHEREAS**, as required by law, notice of the proposed increased water service and sewer services charges was given to the persons responsible for payment of such charges as reflected in the City's records, which included notice of a public hearing to be conducted by the City Council at which time any formal protests to the proposed increases would be considered and counted, such notice having been given at least 45 days prior to the hearing; and

**WHEREAS**, as required by law, the City Council, on April 20, 2023, completed a continued public hearing begun on April 6, 2023, on the proposed increases in water service and sewer services charges, during which hearing interested persons were given an opportunity to orally protest or submit a written protest of the proposed increases in charges; and

**WHEREAS**, formal protests were not made by a majority of the persons who would be responsible for payment of the water and sewer charges,

**NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane as follows:**

1. The schedules of water service and sewer services charges attached hereto is approved (Attachment A).
2. The discount rate for the City's Low Income Rate Assistance Plan shall be 25% for water service and for sewer services charges.
3. The increased rates for water service and sewer services charges shall be effective as of June 15, 2023, and shall be included in the bimonthly bill which will be sent to



customers in August 2023 and due in October 2023, and included in subsequent billings for water service and sewer services thereafter (as reflected in the schedules in Attachment A).

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Mayor

Approved as to Form:

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City Attorney

I hereby certify that the foregoing Resolution No. 2023-\_\_\_\_\_ was duly and regularly adopted at the regular meeting of the Brisbane City Council on April 20, 2023, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Ingrid Padilla, City Clerk

Approved as to form:

Thomas McMorrow, Legal Counsel

Attachment A

**Proposed Bimonthly Water Rates**

| <i>Rate Effective Date:</i>              | <b>PROPOSED WATER RATES</b> |                          |                          |                          |                          |
|--|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  | <b>June 15,<br/>2023</b>    | <b>June 15,<br/>2024</b> | <b>June 15,<br/>2025</b> | <b>June 15,<br/>2026</b> | <b>June 15,<br/>2027</b> |
| <b>FIXED CHARGES</b>                     |                             |                          |                          |                          |                          |
| <u>Meter Size</u>                        |                             |                          |                          |                          |                          |
| 5/8"                                     | \$33.35                     | \$36.17                  | \$39.23                  | \$42.55                  | \$46.28                  |
| 3/4"                                     | \$33.35                     | \$36.17                  | \$39.23                  | \$42.55                  | \$46.28                  |
| 1"                                       | \$41.90                     | \$45.45                  | \$49.29                  | \$53.46                  | \$58.12                  |
| 1-1/2"                                   | \$63.29                     | \$68.65                  | \$74.44                  | \$80.75                  | \$87.72                  |
| 2"                                       | \$88.95                     | \$96.49                  | \$104.62                 | \$113.49                 | \$123.24                 |
| 3"                                       | \$157.37                    | \$170.73                 | \$185.10                 | \$200.79                 | \$217.96                 |
| 4"                                       | \$234.35                    | \$254.25                 | \$275.64                 | \$299.01                 | \$324.52                 |
| 6"                                       | \$448.19                    | \$486.25                 | \$527.14                 | \$571.85                 | \$620.52                 |
| <b>CONSUMPTION CHARGES (per ccf) (1)</b> |                             |                          |                          |                          |                          |
| <u>All Usage over 1 ccf</u>              |                             |                          |                          |                          |                          |
| Tier 1: 1- 20 ccf                        | \$6.30                      | \$6.76                   | \$7.26                   | \$7.79                   | \$8.36                   |
| Tier 2: Over 20 ccf                      | \$12.65                     | \$13.47                  | \$14.34                  | \$15.27                  | \$16.25                  |

(1) 1 ccf = 1 hundred cubic feet = 748 gallons

**Proposed Bimonthly Sewer Rates**

| <i>Rate Effective Date:</i>   | <b>PROPOSED SEWER RATES</b> |                          |                          |                          |                          |
|-------------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                               | <b>June 15,<br/>2023</b>    | <b>June 15,<br/>2024</b> | <b>June 15,<br/>2025</b> | <b>June 15,<br/>2026</b> | <b>June 15,<br/>2027</b> |
| <b>RESIDENTIAL (1)</b>        |                             |                          |                          |                          |                          |
| Flat Charge                   | \$64.20                     | \$79.86                  | \$99.32                  | \$123.54                 | \$153.66                 |
| Variable Charge (per ccf) (2) | \$8.29                      | \$10.15                  | \$12.43                  | \$15.23                  | \$18.67                  |
| <b>COMMERCIAL</b>             |                             |                          |                          |                          |                          |
| <b>Standard</b>               |                             |                          |                          |                          |                          |
| Flat Charge                   | \$64.20                     | \$79.86                  | \$99.32                  | \$123.54                 | \$153.66                 |
| Variable Charge (per ccf)     | \$9.02                      | \$11.04                  | \$13.53                  | \$16.59                  | \$20.33                  |
| <b>Medium</b>                 |                             |                          |                          |                          |                          |
| Flat Charge                   | \$64.20                     | \$79.86                  | \$99.32                  | \$123.54                 | \$153.66                 |
| Variable Charge (per ccf)     | \$11.12                     | \$13.61                  | \$16.68                  | \$20.45                  | \$25.07                  |
| <b>Heavy</b>                  |                             |                          |                          |                          |                          |
| Flat Charge                   | \$64.20                     | \$79.86                  | \$99.32                  | \$123.54                 | \$153.66                 |
| Variable Charge (per ccf)     | \$13.21                     | \$16.18                  | \$19.83                  | \$24.32                  | \$29.81                  |

(1) Residential bill is based on winter consumption (Oct, Nov, Dec & Jan)

(2) 1 ccf = 1 hundred cubic feet = 748 gallons



# **CITY OF BRISBANE**

## **Water and Sewer Utility Rate Study**

**FINAL REPORT**  
**December 2022**



**LECHOWICZ + TSENG**  
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## SECTION 1: INTRODUCTION

---

### 1.1 Background

The City of Brisbane (City) is situated in Northern San Mateo County on the west side of San Francisco Bay. Brisbane borders the cities of San Francisco, Daly City, and South San Francisco. The City provides water and wastewater (sewer) service to about 2,000 customers, serving a total population of about 4,800 people. Both water and sewer rates are billed bimonthly on the same bill. The City's last rate study for water and sewer utility services was prepared in 2001.

In 2021, the City engaged Lechowicz & Tseng Municipal Consultants to complete a comprehensive water and wastewater (sewer) rate study to recommend utility rates to ensure the financial health and stability of the City's water and sewer funds. This study focuses only on the water and sewer rates used to pay for operations, including salaries, wholesale water purchases, treatment charges, supplies and services, and other operating expenses. The operational water and sewer rates do not pay for capital projects, which are funded separately with the Capital Project Charge. Additionally, customers also pay a separate Drought Contingency Surcharge that is set aside in a specific reserve fund to avoid raising rates during a drought. This study recommends water and sewer rates for the five-year period beginning in 2023/24 through 2027/28.

The City's Utility Fund (Fund 540) includes four funds - 1) City Water Utilities (Fund 6110), 2) City Water Maintenance (Fund 6115), 3) City Sewer Utilities (Fund 6130), and 4) the Guadalupe Valley Municipal Improvement District (GVMID) Utility (Fund 6120). The GVMID provides water, sewer, and stormwater services to business and residents located within its district boundaries. The City of Brisbane provides both the management and staff for GVMID, and the water and sewer systems are maintained by the City's Public Works Department as part of the City's overall water and sewer systems.

In order to determine the revenue requirements and rate increases needed for water and sewer separately, the City Water Utilities (Fund 6110), City Water Maintenance (Fund 6115), and GVMID Water funds have been combined into a single fund called the "Water Utility." Similarly, the City Sewer Utilities (Fund 6130) and GVMID Sewer have been combined into a single fund called the "Sewer Utility." GVMID storm water revenues and expenses are not included in this study.

### 1.2 Requirements of Proposition 218

The implementation of utility rates in California is governed by the substantive and procedural requirements of Proposition 218 the "Right to Vote on Taxes Act" which is codified as Articles XIIC and XIID of the California Constitution. The City must follow the procedural requirements of Proposition 218 for all utility rate increases. These requirements include:

1. **Noticing Requirement** – The City must mail a notice of the proposed rate increases to all affected property owners or ratepayers. The notice must specify the amount of the fee, the

basis upon which it was calculated, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.

2. **Public Hearing** – The City must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
3. **Rate Increases Subject to Majority Protest** – At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners or ratepayers submit written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established substantive requirements that apply to water and sewer rates and charges, including:

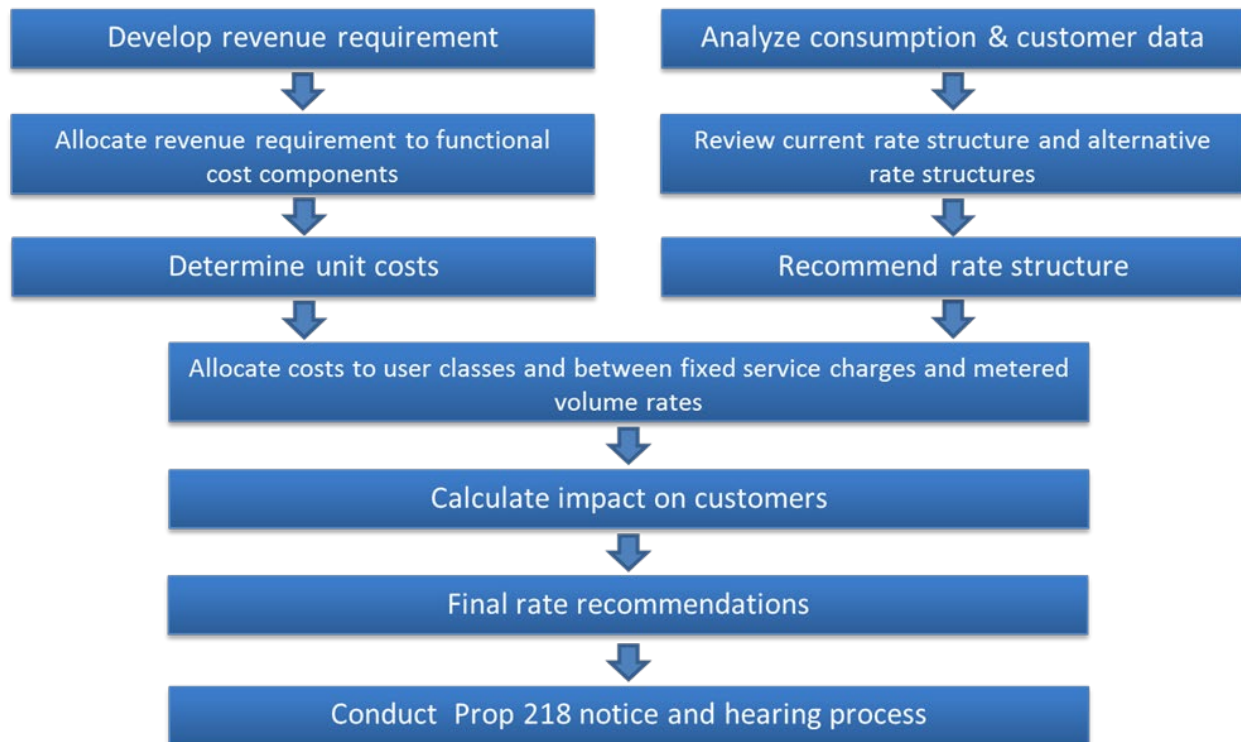
1. **Cost of Service** – Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the “cost of service”.
2. **Intended Purpose** – Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
3. **Proportional Cost Recovery** – The amount of the fee or charge levied on any customer shall not exceed the proportional cost of service attributable to that customer.
4. **Availability of Service** – No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property.
5. **General Government Services** – No fee or charge may be imposed for general governmental services where the service is available to the public at large.

Charges for water and sewer collection are exempt from additional voting requirements of Proposition 218, provided the charges do not exceed the cost of providing service and are adopted pursuant to the procedural requirements of Proposition 218.

### **1.3 Rate Study Process**

This section details the development of the City’s water and sewer rates via the Proposition 218 process as shown in the following figure.

**Figure 1: Comprehensive Cost of Service Study Process**



The following is a brief description of the rate study process:

- **Revenue Requirements** - Revenue requirements are analyzed via financial plans developed from the Water and Sewer Fund budgets. Based on the best information currently available, the financial plans incorporate projected operation and maintenance costs, debt service, and growth to estimate annual revenue requirements. The plans serve as a roadmap for funding the City's future operating expenses while maintaining long-term fiscal stability.
- **Cost of Service Allocation** - The cost of service process builds on the financial plan analysis and assigns water and sewer system costs to functional cost components: *metering and customer service, base, and extra* for water, and *customer service, capital, and treatment/disposal* for sewer.
- **Rate Design** - Rate design involves developing a rate structure that proportionately recovers costs from customers. Final rate recommendations are designed to (a) fund the utilities' short- and long-term costs of providing service; (b) proportionately allocate costs to all customers and customer classes; and (c) comply with the substantive requirements of Proposition 218.

The rates developed in this report were based on the best information available at the time of the study. This information was taken from City budgets, audits, billing information, water consumption data, and input from staff. The cost allocations proposed herein are based on American Water Works Association methodologies and industry standard practice. The proposed rates are based on the reasonable cost of providing service and are proportional to the benefits received by each customer.

## **SECTION 2: WATER RATE STUDY**

---

The City of Brisbane provides water service to approximately 1,300 City water accounts and 700 GVMID water accounts. On average, the City consumes over 270,000 ccf (hundred cubic feet) of water each year. The last water rate study was conducted in 2001, and water rates for operations have not increased since 2012. Based on City billing records, the current average monthly residential water use is 5 ccf per month, or a total of 10 ccf per bimonthly billing period. The average water bill is currently \$120.17 per bimonthly billing period, including Drought Contingency and Capital Project charges.

### **2.1 Current Water Rates**

Schedules of current bimonthly water rates for residential, commercial, and irrigation customers are provided in Table 1, Table 2, and Table 3. The City's current water rate structure includes two components: (a) a Fixed Charge and (b) a Consumption Rate. Moreover, customers are levied two additional charges on their bimonthly utility bill - a Capital Project Charge and a Drought Contingency Charge.

#### **2.1.1 Fixed Charge**

All customers are charged a base service charge based on the size of their water meter. The Fixed Charge is levied regardless of water consumption and recognizes that even when a customer does not use any water, the City incurs fixed costs associated with maintaining the ability or readiness to serve each connection. The current Fixed Charges also vary based on customer class. For example, a residential customer with a 5/8" or 3/4" meter currently pays \$22.67 while a commercial or irrigation customer with the same meter size pays \$35.07.

The Fixed Charges are designed to recover the City's fixed expenses and currently generate about 15% of total water rate revenues. Fixed costs include staffing, customer service, debt service, system maintenance, and repairs.

#### **2.1.2 Consumption Rate**

In addition to the Fixed Charges, all customers pay a Consumption Rate per ccf of water consumption per billing period. One ccf is equal to 748 gallons of water. The charges for water usage are based on a tiered rate system where the price per unit of water is higher as more water is used. The highest rates start at 16 ccf of water usage for each customer class. Most customers pay based on a three-tiered rate structure. However, residential customers with a 5/8" meter receive one unit of water for free and have a five-tiered rate structure and residential customers with a 3/4" meter have four tiers.

The Consumption Rate is intended to recover costs that vary based on the amount of water consumed and currently generate roughly 85% of total water rate revenues. Variable expenses include water purchases, utilities, and chemicals.

### **2.1.3 Capital Project Charge**

In April of 2014, the City Council approved the first Capital Project Charge to pay for infrastructure projects for the water and sewer systems. The projects are based on the City's Capital Improvement Plan which outlines the need for approximately \$5 million in projects every five years. The policy adopted in 2014 included placing a new Capital Project Charge on the water and sewer bill four times over a twenty-year period. The second charge should have been implemented in 2020 but was delayed due to the impacts of COVID. To prevent further delays in completing the projects, the City Council adopted the second of four increases to the Capital Project Charge in October 2022.

The Capital Project Charge is levied according to a tiered rate system based on springtime usage (mid-February through mid-June) to ensure that lower water users pay less than higher users. Total Capital Project Charge revenue is evenly split between the water and sewer funds. The Capital Project Charge will not be reviewed or analyzed in this study.

### **2.1.4 Drought Contingency Charges**

Approved by the City in 2018, the Drought Contingency Charge was enacted to create a separate drought reserve fund with the objective of avoiding having to raise rates in times of severe water shortages. For residential and commercial accounts, the charge is \$2.32 per bimonthly billing period for customers whose annual average consumption is below the median use of 12 ccf. For customers whose use is above the median, the bimonthly charge is \$6.99. For irrigation customers, the charge is \$102.14 per billing period. The Drought Contingency Charge will not be reviewed or analyzed in this study.



**Table 1: Current Bi-Monthly Residential Water Rates  
City of Brisbane  
Water Utility Rate Study 2022**

| <b>RESIDENTIAL WATER RATES</b> |             |                         |
|--------------------------------|-------------|-------------------------|
| <b>FIXED CHARGES</b>           |             |                         |
| <u>Meter Size</u>              |             | <u>Bimonthly Charge</u> |
| 5/8"                           |             | \$22.67                 |
| 3/4"                           |             | \$22.67                 |
| 1"                             |             | \$30.60                 |
| 1-1/2"                         |             | \$61.14                 |
| 2"                             |             | \$97.85                 |
| 3"                             |             | \$195.73                |
| 4"                             |             | \$305.78                |
| <b>CONSUMPTION CHARGES</b>     |             |                         |
| <u>Meter Size</u>              | <u>Tier</u> | <u>Bimonthly Charge</u> |
| 5/8"                           | 0 - 1 ccf   | \$0.00                  |
|                                | 1 - 2 ccf   | \$2.17                  |
|                                | 3 ccf       | \$5.63                  |
|                                | 4 - 8 ccf   | \$7.00                  |
|                                | 9 - 16 ccf  | \$8.69                  |
|                                | Over 16 ccf | \$11.05                 |
| 3/4"                           | 0 - 3 ccf   | \$5.19                  |
|                                | 4 - 8 ccf   | \$7.00                  |
|                                | 9 - 16 ccf  | \$8.69                  |
|                                | Over 16 ccf | \$11.05                 |
| All Other Meter Sizes          | 0 - 8 ccf   | \$7.00                  |
|                                | 9 - 16 ccf  | \$8.69                  |
|                                | Over 16 ccf | \$11.05                 |

Effective 10/15/2012

ccf = cubic feet. 1 ccf = 748 gallons

**Table 2: Current Bi-Monthly Commercial Water Rates  
City of Brisbane  
Water Utility Rate Study 2022**

| <b>COMMERCIAL WATER RATES</b> |             |                         |
|-------------------------------|-------------|-------------------------|
| <b>FIXED CHARGES</b>          |             |                         |
| <u>Meter Size</u>             |             | <u>Bimonthly Charge</u> |
| 5/8"                          |             | \$35.07                 |
| 3/4"                          |             | \$41.46                 |
| 1"                            |             | \$58.41                 |
| 1-1/2"                        |             | \$116.80                |
| 2"                            |             | \$186.90                |
| 3"                            |             | \$373.75                |
| 4"                            |             | \$587.00                |
| 6"                            |             | \$1,168.00              |
| <b>CONSUMPTION CHARGES</b>    |             |                         |
| <u>Meter Size</u>             | <u>Tier</u> | <u>Bimonthly Charge</u> |
| 5/8" & 3/4"                   | 0 - 8 ccf   | \$5.20                  |
|                               | 9 - 16 ccf  | \$8.69                  |
|                               | Over 16 ccf | \$11.05                 |
| All Other Meter Sizes         | 0 - 8 ccf   | \$7.00                  |
|                               | 9 - 16 ccf  | \$8.69                  |
|                               | Over 16 ccf | \$11.05                 |

Effective 10/15/2012

ccf = cubic feet. 1 ccf = 748 gallons

**Table 3: Current Bi-Monthly Irrigation Water Rates  
City of Brisbane  
Water Utility Rate Study 2022**

| <b>IRRIGATION WATER RATES</b> |             |                         |
|-------------------------------|-------------|-------------------------|
| <b>FIXED CHARGES</b>          |             |                         |
| <u>Meter Size</u>             |             | <u>Bimonthly Charge</u> |
| 5/8"                          |             | \$35.07                 |
| 3/4"                          |             | \$41.46                 |
| 1"                            |             | \$44.64                 |
| 1-1/2"                        |             | \$66.95                 |
| 2"                            |             | \$92.47                 |
| 3"                            |             | \$178.56                |
| 4"                            |             | \$521.55                |
| <b>CONSUMPTION CHARGES</b>    |             |                         |
| <u>Meter Size</u>             | <u>Tier</u> | <u>Bimonthly Charge</u> |
| All except for<br>4"          | 0 - 8 ccf   | \$5.18                  |
|                               | 9 - 16 ccf  | \$11.35                 |
|                               | Over 16 ccf | \$13.19                 |
| 4" Meter                      | 0 - 8 ccf   | \$8.49                  |
|                               | 9 - 16 ccf  | \$11.35                 |
|                               | Over 16 ccf | \$13.19                 |

Effective 10/15/2012

ccf = cubic feet. 1 ccf = 748 gallons

## **2.2 Water System Overview**

### **2.2.1 Water System**

The City obtains all of its water from the San Francisco Public Utilities Commission (SFPUC) through five turnouts of the Crystal Springs Pipeline. Approximately 80% of the SFPUC’s water supply is from the Hetch Hetchy Reservoir in Yosemite National Park, with the Alameda and Peninsula Watersheds supplying the remainder.

The City operates two separate water districts—the City of Brisbane Water District and the Guadalupe Valley Municipal Improvement District (GVMID). GVMID serves Crocker Industrial Park and the Northeast Ridge Development, while the City of Brisbane Water District serves the remainder of the City including Central Brisbane, Sierra Point, and the Baylands. The City Water Enterprise is interconnected with the GVMID Combined Enterprise, allowing for maximum circulation and flow within the system. The combined water distribution system includes 5 water storage tanks, 4 booster pump stations serving 7 pressure zones, more than 25 miles of underground pipeline, and over 700 valves.

### **2.2.2 Water Customers**

The City of Brisbane provides water service to approximately 1,284 City water accounts and 754 GVMID water accounts as shown on Table 4. The majority of customers are single family residential customers with 5/8” meters.

**Table 4: Number of Water Accounts by Meter Size & Customer Class for 2020**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|                             | 5/8"         | 3/4"       | 1"         | 1-1/2"     | 2"        | 3"        | 4"       | TOTAL        | % of Total    |
|-----------------------------|--------------|------------|------------|------------|-----------|-----------|----------|--------------|---------------|
| <b>CITY</b>                 |              |            |            |            |           |           |          |              |               |
| Single Family Residential   | 832          | 89         | 90         | 19         | 0         | 0         | 0        | 1,030        | 50.5%         |
| Multi-Family Residential    | 79           | 7          | 12         | 7          | 6         | 1         | 1        | 113          | 5.5%          |
| Commercial/Government       | 55           | 9          | 6          | 4          | 12        | 9         | 3        | 98           | 4.8%          |
| Landscape                   | 1            | 3          | 6          | 2          | 16        | 4         | 0        | 32           | 1.6%          |
| Hydrant                     | 0            | 0          | 0          | 0          | 0         | 11        | 0        | 11           | 0.5%          |
| Total City                  | 967          | 108        | 114        | 32         | 34        | 25        | 4        | 1,284        | 63.0%         |
| <b>GVMID</b>                |              |            |            |            |           |           |          |              |               |
| Single Family Residential   | 351          | 26         | 50         | 77         | 0         | 0         | 0        | 504          | 24.7%         |
| Multi-Family Residential    | 0            | 0          | 0          | 0          | 0         | 0         | 0        | 0            | 0.0%          |
| Commercial/Government       | 90           | 19         | 21         | 31         | 21        | 6         | 0        | 188          | 9.2%          |
| Landscape                   | 1            | 3          | 7          | 24         | 25        | 0         | 0        | 60           | 2.9%          |
| Hydrant                     | 0            | 0          | 0          | 0          | 0         | 2         | 0        | 2            | 0.1%          |
| Total GVMID                 | 442          | 48         | 78         | 132        | 46        | 8         | 0        | 754          | 37.0%         |
| <b>Customer Class</b>       |              |            |            |            |           |           |          |              |               |
| Single Family Residential   | 1,183        | 115        | 140        | 96         | 0         | 0         | 0        | 1,534        | 75.3%         |
| Multi-Family Residential    | 79           | 7          | 12         | 7          | 6         | 1         | 1        | 113          | 5.5%          |
| Commercial/Government       | 145          | 28         | 27         | 35         | 33        | 15        | 3        | 286          | 14.0%         |
| Landscape                   | 2            | 6          | 13         | 26         | 41        | 4         | 0        | 92           | 4.5%          |
| Hydrant                     | 0            | 0          | 0          | 0          | 0         | 13        | 0        | 13           | 0.6%          |
| <b>TOTAL WATER ACCOUNTS</b> | <b>1,409</b> | <b>156</b> | <b>192</b> | <b>164</b> | <b>80</b> | <b>33</b> | <b>4</b> | <b>2,038</b> | <b>100.0%</b> |

Source: Number of Accts & Total Water Use by Class 2018-2020

### 2.2.3 Water Consumption

Table 5 summarizes annual water consumption by customer class for the past 3 calendar years. In 2020, total consumption increased approximately 8.0%. In total, residential customers (single family and multi-family) account for roughly 36% of overall consumption. Commercial accounts represent approximately 35% of total use. Irrigation use accounts for 26% of total consumption, followed by hydrant use at nearly 3%.

**Table 5: Annual Water Consumption  
City of Brisbane  
Water Utility Rate Study 2022**

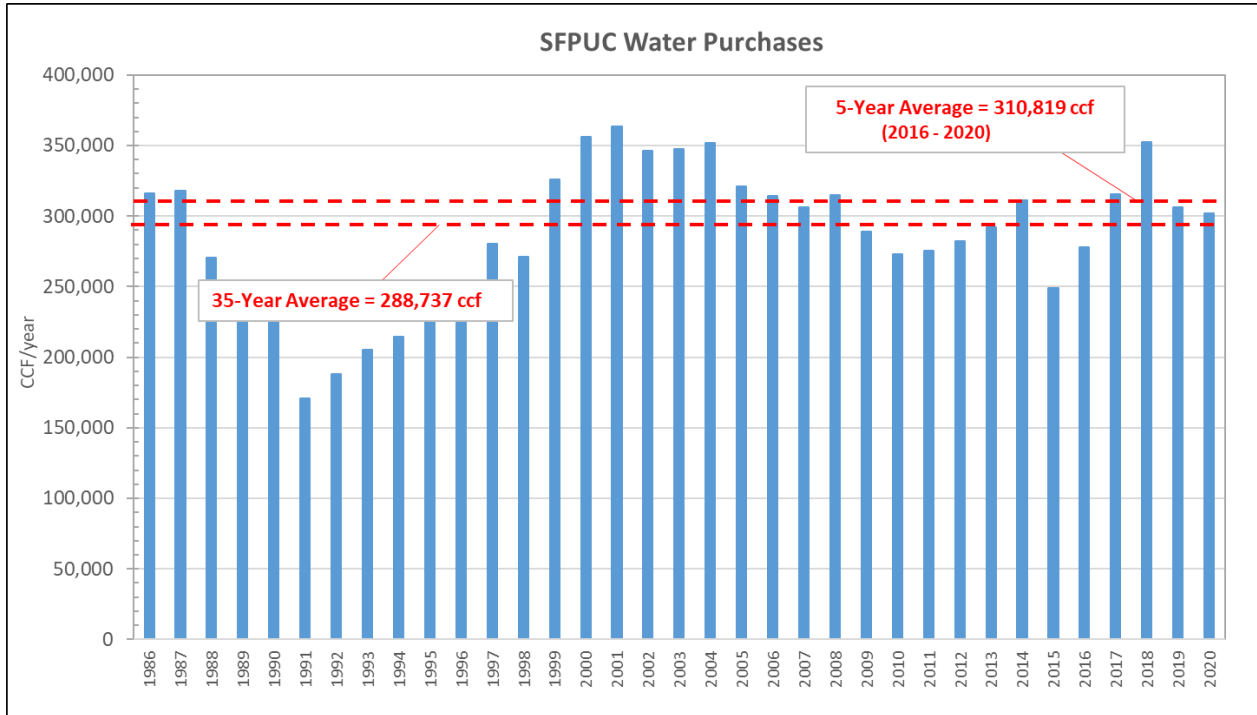
| Calendar Year             | 2018           | 2019           | 2020           | 3-Year Average | % of Total    |
|---------------------------|----------------|----------------|----------------|----------------|---------------|
| <b>CITY</b>               |                |                |                |                |               |
| Single Family Residential | 56,169         | 55,666         | 61,134         | 57,656         | 20.4%         |
| Multi-Family Residential  | 15,312         | 16,603         | 17,437         | 16,451         | 5.8%          |
| Commercial/Government     | 33,983         | 32,443         | 28,959         | 31,795         | 11.2%         |
| Landscape                 | 37,177         | 31,786         | 39,283         | 36,082         | 12.7%         |
| Hydrant                   | <u>0</u>       | <u>0</u>       | <u>22,998</u>  | <u>7,666</u>   | <u>2.7%</u>   |
| Total City                | 142,641        | 136,498        | 169,811        | 149,650        | 52.9%         |
| Percent Change            |                | -4%            | 24%            |                |               |
| <b>GVMID</b>              |                |                |                |                |               |
| Single Family Residential | 26,197         | 26,553         | 30,662         | 27,804         | 9.8%          |
| Multi-Family Residential  | 0              | 0              | 0              | 0              | 0.0%          |
| Commercial/Government     | 79,437         | 69,714         | 51,947         | 67,033         | 23.7%         |
| Landscape                 | 38,456         | 37,544         | 39,409         | 38,470         | 13.6%         |
| Hydrant                   | <u>0</u>       | <u>0</u>       | <u>184</u>     | <u>61</u>      | <u>0.0%</u>   |
| Total GVMID               | 144,090        | 133,811        | 122,202        | 133,368        | 47.1%         |
| Percent Change            |                | -7.1%          | -8.7%          |                |               |
| <b>TOTAL</b>              |                |                |                |                |               |
| Single Family Residential | 82,366         | 82,219         | 91,796         | 85,460         | 30.2%         |
| Multi-Family Residential  | 15,312         | 16,603         | 17,437         | 16,451         | 5.8%          |
| Commercial/Government     | 113,420        | 102,157        | 80,906         | 98,828         | 34.9%         |
| Landscape                 | 75,633         | 69,330         | 78,692         | 74,552         | 26.3%         |
| Hydrant                   | <u>0</u>       | <u>0</u>       | <u>23,182</u>  | <u>7,727</u>   | <u>2.7%</u>   |
| <b>TOTAL WATER USE</b>    | <b>286,731</b> | <b>270,309</b> | <b>292,013</b> | <b>283,018</b> | <b>100.0%</b> |
| Percent Change            |                | -5.7%          | 8.0%           |                |               |

Source: Number of Accts & Total Water Use by Class 2018-2020

## 2.2.4 SFPUC Wholesale Water

This chart shows the City's historical SFPUC water purchases over the past 35 years by calendar year. The five-year average from 2016 through 2020 is 310,819 ccf.

**Figure 2: Historical SFPUC Water Purchases  
City of Brisbane  
Water Utility Rate Study 2022**



## 2.3 Water Financial Plan

### 2.3.1 Water Reserves

For accounting, the City’s Utility Fund (Fund 540) combines water and sewer finances into one fund. As of July 1, 2021, the total fund balance for the Utility Fund (Fund 540) in “Cash and investments” was approximately \$7.7 million. However, for the purposes of this study, the total reserves have been allocated between the water and sewer funds as shown on Table 6. Because the Sewer Utility is currently operating in a deficit, additional reserves have been assigned to the sewer utility to mitigate rate impacts. Cash reserves are not split evenly between the water and sewer funds. The allotted beginning fund balance for the water utility is \$2.8 million.

**Table 6: Utility Fund (Fund 540) Reserves  
City of Brisbane  
Water Utility Rate Study 2022**

| Fund                                       | Beginning Balance as of June 30, 2021 |
|--|---------------------------------------|
| Total Utility Fund (Fund 540) Reserves (1) | \$7,656,890                           |
| Water Utility Reserves (2)                 | \$2,828,445                           |
| Sewer Utility Reserves (2)                 | \$4,828,445                           |

1) Cash and investments (Unaudited Financials).

Source: Proprietary Funds, Statement of Net Position, June 30, 2020

2) Includes GVMID

Adequate fund reserves protect the City when faced with unforeseen financial challenges such as emergency expenses or revenue deficits. Fund reserves allow the City to maintain its financial health and positive credit ratings, especially during emergencies. Moreover, funding can be drawn from reserves to supplement rate revenues lost during drought conditions or other unexpected situations. It is acceptable if reserves dip below the target on a temporary basis, provided the City takes action to attain the target over the longer run.

The City currently has two water reserve fund targets:

- *Operating Reserve:* The fund balance target is equal to 35% of annual operating expenses per City policy. This is in line with industry standards that recommend an operating reserve target of at least 25% of annual expenses to account for the time (at least 4 months) that it would take an agency to approve new rate increases to comply with Proposition 218.
- *Drought Reserve:* The fund balance target is \$700,000 which the City would draw on only if needed during times of severe drought. This reserve is funded by the Drought Contingency Surcharges.

### **2.3.2 Water Revenues**

Table 7 shows a history of revenues for Utility Fund (Fund 540). The “Water Sales” revenues are evenly split between City Water and GVMID Water. “Sewer Service Charges” are evenly split between City Sewer and GVMID Sewer. The “GVMID Only” tax revenues are divided evenly between the three GVMID utilities (GVMID water, sewer, and storm drain). The GVMID storm drain revenues are not included in this study. All Other Revenues including “Investment Earnings,” “Low Income Rate Assistance,” and “Capital Charge” are divided evenly amongst the four utilities.



**Table 7: Utility Fund (Fund 540) Budgeted Revenues  
City of Brisbane  
Water Utility Rate Study 2022**

| REVENUE CATEGORY                         | Actual<br>2018/19  | Budgeted           |                    |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  |                    | 2019/20            | 2020/21            | 2021/22            |
| <b>WATER ONLY (1)</b>                    |                    |                    |                    |                    |
| 40801 Water Sales                        | \$3,050,110        | \$2,950,000        | \$2,750,000        | \$3,000,000        |
| 40804 Meter Connection Fees              | \$68,663           | \$20,000           | \$20,000           | \$20,000           |
| 40805 Fire Service Charges               | \$118,952          | \$115,000          | \$115,000          | \$115,000          |
| 40806 Altamar Meter Reading Fee          | \$7,656            | \$7,500            | \$7,500            | \$7,500            |
| <u>Drought Reserve Charge</u>            | <u>\$95,481</u>    | <u>\$120,000</u>   | <u>\$100,000</u>   | <u>\$100,000</u>   |
| <b>Total Water Only</b>                  | <b>\$3,340,862</b> | <b>\$3,212,500</b> | <b>\$2,992,500</b> | <b>\$3,242,500</b> |
| <b>SEWER ONLY (2)</b>                    |                    |                    |                    |                    |
| 40820 Sewer Service Charges              | \$2,188,866        | \$2,200,000        | \$2,000,000        | \$2,000,000        |
| 40821 <u>Sewer Connection Fees</u>       | <u>\$123,706</u>   | <u>\$3,000</u>     | <u>\$3,000</u>     | <u>\$3,000</u>     |
| <b>Total Sewer Only</b>                  | <b>\$2,312,572</b> | <b>\$2,203,000</b> | <b>\$2,003,000</b> | <b>\$2,003,000</b> |
| <b>GVMID ONLY (3)</b>                    |                    |                    |                    |                    |
| 40101 Current Secured Tax                | \$27,358           | \$29,000           | \$29,000           | \$29,000           |
| 40102 Current Unsecured Tax              | \$1,513            | \$1,500            | \$1,500            | \$1,500            |
| 40103 Prior Year Tax                     | (\$1)              | \$0                | \$0                | \$0                |
| 40105 Supplemental Property Taxes        | \$1,048            | \$0                | \$0                | \$0                |
| 40108 Property Tax from RDA              | \$2,866            | \$100              | \$100              | \$100              |
| 40150 <u>ERAF</u>                        | <u>\$134</u>       | <u>\$100</u>       | <u>\$100</u>       | <u>\$100</u>       |
| <b>Total GVMID</b>                       | <b>\$32,918</b>    | <b>\$30,700</b>    | <b>\$30,700</b>    | <b>\$30,700</b>    |
| <b>ALL OTHER REVENUES (4)</b>            |                    |                    |                    |                    |
| 40501 Investment Earnings                | \$133,599          | \$50,000           | \$50,000           | \$50,000           |
| 40503 Unrealized-Gain/Loss               | \$96,152           | \$0                | \$0                | \$0                |
| 40609 H.O.P.T R                          | \$121              | \$100              | \$100              | \$100              |
| 40770 Processing Fee                     | \$5,472            | \$0                | \$0                | \$0                |
| 40802 Account Open/Reconnections         | \$2,987            | \$3,000            | \$3,000            | \$3,000            |
| 40803 Late Payment Charges               | \$8,117            | \$10,000           | \$10,000           | \$10,000           |
| 40810 Less: Low Income Rate Assistance   | (\$42,336)         | (\$50,000)         | (\$75,000)         | (\$75,000)         |
| 40825 Capital Charge                     | \$378,443          | \$365,000          | \$365,000          | \$365,000          |
| 40941 Returned Check Fees                | \$75               | \$0                | \$0                | \$0                |
| 40959 Reimbursed Expenses - Current Year | \$3,541            | \$0                | \$0                | \$0                |
| 40961 <u>Transfers from Other Funds</u>  | <u>\$43,000</u>    | <u>\$50,000</u>    | <u>\$75,000</u>    | <u>\$75,000</u>    |
| <b>Total All Other Revenues</b>          | <b>\$629,172</b>   | <b>\$428,100</b>   | <b>\$428,100</b>   | <b>\$428,100</b>   |
| <b>TOTAL REVENUES</b>                    | <b>\$6,315,524</b> | <b>\$5,874,300</b> | <b>\$5,454,300</b> | <b>\$5,704,300</b> |

Source: Budget 2020\_2022

1 - Divided by 2 between City Water & GVMID Water

2 - Divided by 2 between City Sewer & GVMID Sewer

3 - Divided by 3 between GVMID Water, Sewer, & Stormwater

4 - Divided by 4 between City Water, City Sewer, GVMID Water, & GVMID Sewer

Table 8 summarizes total revenues for the Water Utility. For 2021/22, Water Sales are estimated at \$3 million with total water revenues projected at \$3.4 million.

**Table 8: Water Utility Revenues**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|                               | Actual<br>2018/19 | Budget           |                  |                  |
|-------------------------------|-------------------|------------------|------------------|------------------|
|                               |                   | 2019/20          | 2020/21          | 2021/22          |
| <b>WATER REVENUES</b>         |                   |                  |                  |                  |
| Water Sales                   | \$3,050,110       | \$2,950,000      | \$2,750,000      | \$3,000,000      |
| Other Water Only Revenues (1) | \$195,271         | \$142,500        | \$142,500        | \$142,500        |
| Drought Reserve Charge        | \$95,481          | \$120,000        | \$100,000        | \$100,000        |
| <u>All Other Revenues (2)</u> | <u>\$314,586</u>  | <u>\$214,050</u> | <u>\$214,050</u> | <u>\$214,050</u> |
| Total                         | \$3,655,448       | \$3,426,550      | \$3,206,550      | \$3,456,550      |
| <i>Percent Change</i>         |                   | -6.3%            | -6.4%            | 7.8%             |

1 - Includes Meter Connection Fees, Fire Service Charges, and Altamar Meter Reading Fees

2 - All Other Revenues divided by 2 (Table 7)

### 2.3.3 Water Expenses

Table 9 summarizes the operating expenses for Water Utilities (Fund 1110). On average, operating expenses have increased by 7% over the past 4 years.

**Table 9: Water Utilities (Fund 1110) Operating Expenses  
City of Brisbane  
Water Utility Rate Study 2022**

| Expense (1)                               | Actual<br>2018/19  | Budgeted           |                    |                    | Avg Annual<br>Increase |
|---|--------------------|--------------------|--------------------|--------------------|------------------------|
|   |                    | 2019/20            | 2020/21            | 2021/22            |                        |
| Salaries                                  | \$176,372          | \$270,136          | \$369,070          | \$383,832          |                        |
| <i>Percent Change</i>                     | 12.9%              | 53.2%              | 36.6%              | 4.0%               | 21.5%                  |
| Payroll Taxes                             | \$2,642            | \$3,884            | \$5,308            | \$5,522            |                        |
| <i>Percent Change</i>                     | 13.1%              | 47.0%              | 36.7%              | 4.0%               | 20.2%                  |
| Benefits                                  | \$112,905          | \$180,750          | \$186,854          | \$217,088          |                        |
| <i>Percent Change</i>                     | 28.0%              | 60.1%              | 3.4%               | 16.2%              | 17.8%                  |
| Insurance                                 | \$26,657           | \$28,196           | \$45,594           | \$45,764           |                        |
| <i>Percent Change</i>                     | 36.3%              | 5.8%               | 61.7%              | 0.4%               | 14.5%                  |
| Supplies and Services                     | \$1,092,293        | \$1,111,297        | \$1,247,416        | \$1,236,584        |                        |
| <i>Percent Change</i>                     | 4.8%               | 1.7%               | 12.2%              | -0.9%              | 3.2%                   |
| Admin Charges and Credits                 | \$300,162          | \$323,897          | \$322,357          | \$346,290          |                        |
| <i>Percent Change</i>                     | 7.0%               | 7.9%               | -0.5%              | 7.4%               | 3.6%                   |
| <b>TOTAL FUND 1110 OPERATING EXPENSES</b> | <b>\$1,711,033</b> | <b>\$1,918,160</b> | <b>\$2,176,599</b> | <b>\$2,235,080</b> |                        |
| <i>Percent Change</i>                     | 7.7%               | 12.1%              | 13.5%              | 2.7%               | 6.9%                   |

Source: Budget 2020\_2022

1 - Does not include depreciation

Table 10 summarizes the operating expenses for GVMID Utility (Fund 6120). On average, total GVMID operating expenses have increased by 7% over the past 4 years. Each expense category is divided by 3 to determine how much should be allocated to the Water Utility, Sewer Utility, and GVMID storm water. GVMID storm water expenses are not included in this study.

**Table 10: GVMID Combined Utility (Fund 6120) Operating Expenses**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

| Expense (1)                                   | Actual<br>2018/19  | Budgeted           |                    |                    | Avg Annual<br>Increase | 2021/22 Budget<br>per Utility (2) |
|---|--------------------|--------------------|--------------------|--------------------|------------------------|-----------------------------------|
|   |                    | 2019/20            | 2020/21            | 2021/22            |                        |                                   |
| Salaries                                      | \$180,809          | \$179,236          | \$333,150          | \$345,879          |                        | \$115,293                         |
| <i>Percent Change</i>                         | -5.3%              | -0.9%              | 85.9%              | 3.8%               | 17.6%                  |                                   |
| Payroll Taxes                                 | \$3,987            | \$2,306            | \$4,584            | \$4,769            |                        | \$1,590                           |
| <i>Percent Change</i>                         | 39.2%              | -42.2%             | 98.8%              | 4.0%               | 4.6%                   |                                   |
| Benefits                                      | \$98,172           | \$95,450           | \$153,452          | \$181,974          |                        | \$60,658                          |
| <i>Percent Change</i>                         | 0.8%               | -2.8%              | 60.8%              | 18.6%              | 16.7%                  |                                   |
| Insurance                                     | \$15,567           | \$16,406           | \$39,376           | \$39,521           |                        | \$13,174                          |
| <i>Percent Change</i>                         | -7.8%              | 5.4%               | 140.0%             | 0.4%               | 26.2%                  |                                   |
| Supplies and Services                         | \$1,105,804        | \$1,166,543        | \$1,165,054        | \$1,291,240        |                        | \$430,413                         |
| <i>Percent Change</i>                         | 41.8%              | 5.5%               | -0.1%              | 10.8%              | 4.0%                   |                                   |
| Admin Charges and Credits                     | \$303,900          | \$335,321          | \$341,554          | \$380,262          |                        | \$126,754                         |
| <i>Percent Change</i>                         | -2.0%              | 10.3%              | 1.9%               | 11.3%              | 5.8%                   |                                   |
| <b>TOTAL GVMID UTILITY OPERATING EXPENSES</b> | <b>\$1,708,239</b> | <b>\$1,795,263</b> | <b>\$2,037,171</b> | <b>\$2,243,645</b> |                        | <b>\$747,882</b>                  |
| <i>Percent Change</i>                         | 22.2%              | 5.1%               | 13.5%              | 10.1%              | 7.1%                   |                                   |

Source: Budget 2020\_2022

1 - Does not include expenses to "Operate a Storm Drain System" or Depreciation

2 - Budget divided by the 3 GVMID utilities (water, sewer, & storm water)

Table 11 combines the Water Utilities (Fund 1110) Operating Expenses from Table 9 with the GVMID Combined Utility (Fund 6120) Operating Expenses from Table 10 to calculate the total Water Utility expenses. As described above, only one third of the GVMID Combined Utility expenses are categorized as Water Utility expenses.

**Table 11: Water Utility Combined Operating Expenses**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

| Expense (1)                           | Actual<br>2018/19  | Budget             |                    |                    |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                       |                    | 2019/20            | 2020/21            | 2021/22            |
| Salaries                              | \$236,642          | \$329,881          | \$480,120          | \$499,125          |
| Payroll Taxes                         | \$3,971            | \$4,653            | \$6,836            | \$7,112            |
| Benefits                              | \$145,629          | \$212,567          | \$238,005          | \$277,746          |
| Insurance                             | \$31,846           | \$33,664           | \$58,719           | \$58,938           |
| Supplies and Services                 | \$1,460,895        | \$1,500,145        | \$1,635,767        | \$1,666,998        |
| Admin Charges and Credits             | <u>\$401,462</u>   | <u>\$435,670</u>   | <u>\$436,209</u>   | <u>\$473,044</u>   |
| <b>TOTAL WATER OPERATING EXPENSES</b> | <b>\$2,280,446</b> | <b>\$2,516,581</b> | <b>\$2,855,656</b> | <b>\$2,982,962</b> |
| <i>Percent Change</i>                 | 11.0%              | 10.4%              | 13.5%              | 4.5%               |

Source: Budget 2020\_2022

1 - Does not include Depreciation

Table 12 includes a projection of future water operating expenses over the next five years through 2027/28. Escalation factors were determined using City input. Supplies and Services, which includes water purchases, is projected to increase by 10.0% each year. Salaries and Benefits are projected to increase by 4.0% each year. Insurance is increased by 5.0% per year, and Admin Charges and Credits are escalated by 3.0% each year. Overall, water operating expenses are projected to increase by approximately 7 to 8% each year.

**Table 12: Water Utility Projection of Future Operating Expenses**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

| Expense (1)                           | Budget<br>2021/22  | Escalation<br>Factor | Projected<br>2022/23 | Years 1 - 5: Proposition 218 |                    |                    |                    |                    |
|---------------------------------------|--------------------|----------------------|----------------------|------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                       |                    |                      |                      | 2023/24                      | 2024/25            | 2025/26            | 2026/27            | 2027/28            |
| Salaries                              | \$499,125          | 4.0%                 | \$519,000            | \$540,000                    | \$562,000          | \$584,000          | \$607,000          | \$631,000          |
| Payroll Taxes                         | \$7,112            | 4.0%                 | \$7,000              | \$7,000                      | \$7,000            | \$7,000            | \$7,000            | \$7,000            |
| Benefits                              | \$277,746          | 4.0%                 | \$289,000            | \$301,000                    | \$313,000          | \$326,000          | \$339,000          | \$353,000          |
| Insurance (2)                         | \$58,938           | 5.0%                 | \$65,000             | \$68,000                     | \$71,000           | \$75,000           | \$79,000           | \$83,000           |
| Supplies and Services                 | \$1,666,998        | 10.0%                | \$1,932,000          | \$2,125,000                  | \$2,338,000        | \$2,572,000        | \$2,829,000        | \$3,112,000        |
| Admin Charges and Credits             | <u>\$473,044</u>   | 3.0%                 | <u>\$487,000</u>     | <u>\$502,000</u>             | <u>\$517,000</u>   | <u>\$533,000</u>   | <u>\$549,000</u>   | <u>\$565,000</u>   |
| <b>TOTAL WATER OPERATING EXPENSES</b> | <b>\$2,982,962</b> |                      | <b>\$3,299,000</b>   | <b>\$3,543,000</b>           | <b>\$3,808,000</b> | <b>\$4,097,000</b> | <b>\$4,410,000</b> | <b>\$4,751,000</b> |
| <i>Percent Change</i>                 | 4.5%               |                      | 10.6%                | 7.4%                         | 7.5%               | 7.6%               | 7.6%               | 7.7%               |

Source: Budget 2020\_2022

1 - Does not include Depreciation

### 2.3.4 Water Purchases

As shown on Table 13, wholesale water purchases are the largest expense for the Water Utility, accounting for nearly half of total operating expenses in 2022/23.

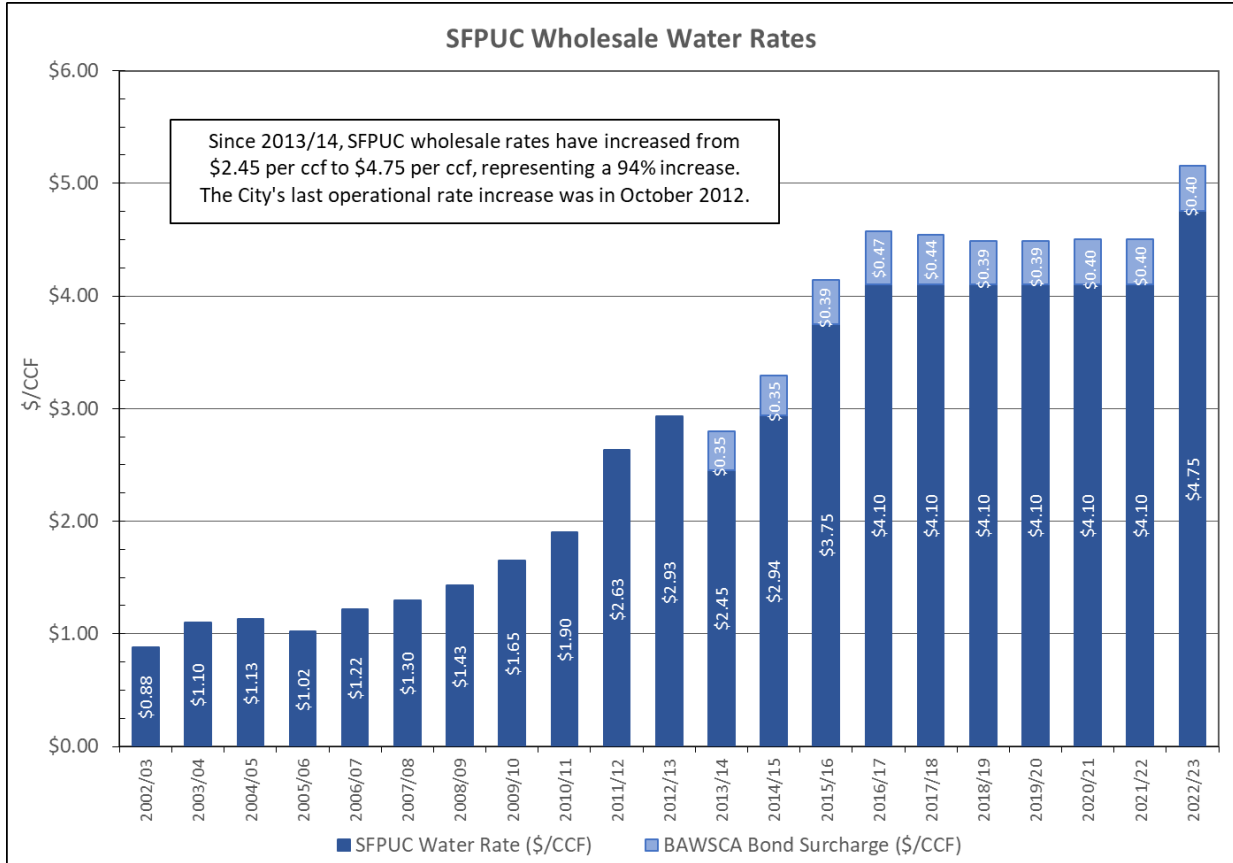
**Table 13: SFPUC Water Purchase Costs**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|  | Budget      |             |             |             | Projected<br>2022/23 |
|--|-------------|-------------|-------------|-------------|----------------------|
|  | 2018/19     | 2019/20     | 2020/21     | 2021/22     |                      |
| <b>Estimated SFPUC Rate (\$ per ccf) (1)</b>           | \$4.49      | \$4.49      | \$4.50      | \$4.50      | \$5.15               |
| <i>% Increase</i>                                      |             | 0.0%        | 0.2%        | 0.0%        | 14.5%                |
| <b>Estimated Total Water Purchased (ccf)</b>           | 352,347     | 306,221     | 302,003     | 302,003     | 311,063              |
| <i>% Increase</i>                                      |             | -13.1%      | -1.4%       | 0.0%        | 3.0%                 |
| <b>Total Water Purchases</b>                           | \$1,582,038 | \$1,374,932 | \$1,359,014 | \$1,359,014 | \$1,602,566          |
| <i>% Increase</i>                                      |             | -13.1%      | -1.2%       | 0.0%        | 17.9%                |
| <b>Total Water Operating Expenses</b>                  | \$2,280,446 | \$2,516,581 | \$2,855,656 | \$2,982,962 | \$3,299,000          |
| <i>% Increase</i>                                      |             | 10.4%       | 13.5%       | 4.5%        | 10.6%                |
| <b>% of Water Purchases / Total Operating Expenses</b> | 69.4%       | 54.6%       | 47.6%       | 45.6%       | 48.6%                |

1 - Includes both the water rate and BAWSCA Surcharge

In 2022/23, the SFPUC implemented a 16% increase for its water rates to \$4.75 per ccf. The SFPUC is nearing its completion of the \$4.8 billion Water System Improvement Project (WSIP) to upgrade the Hetch Hetchy Water System; however, the SFPUC is projecting significant increases to its operating costs over the next five years and rates are projected to continue to increase. Figure 3 shows historical SFPUC wholesale water rates.

**Figure 3: Historical SFPUC Wholesale Water Rates  
City of Brisbane  
Water Utility Rate Study 2022**



The chart above shows SFPUC’s historical wholesale water rates since 2002/03. Since 2013/14, SFPUC wholesale rates have increased from \$2.45 per ccf to \$4.75 per ccf, representing a 94% increase. To be conservative, this study estimates that wholesale rates will increase by 10.0% each year during the rate study period. The chart shows the actual wholesale water rate as well as the separate BAWSCA bond surcharge.

In 2013, BAWSCA issued Revenue Bonds (Series 2013A and 2013B) to prepay the remaining capital cost recovery payments that the BAWSCA member agencies owed the SFPUC as of June 30, 2013. Beginning in 2013/14, BAWSCA began collecting a fixed bond surcharge from each member agency as a separate item on their monthly water bills from the SFPUC. The payments are used to make debt service payments on the revenue bonds, reimburse bond administration expenses, and, as necessary, replenish a stabilization fund set up to limit the volatility in annual changes in the payments.

The allocation of the bond surcharge among the BAWSCA member agencies in a given year is based on the prior year’s actual water sales to each agency. The following year, a financial reconciliation is

performed where each agency's final payments are adjusted based on actual water sales during the prior year. The current BAWSCA bond surcharge is \$0.40 per ccf.

### 2.3.5 Water Net Revenues

The water utility has been doing well for the past few years, fully covering costs while building reserves. For 2021/22, total net revenues are projected at approximately \$155,245, as noted below in Table 14.

**Table 14: Water Net Revenues**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|                           | Actual<br>2018/19  | Budget           |                  |                  |
|---------------------------|--------------------|------------------|------------------|------------------|
|                           |                    | 2019/20          | 2020/21          | 2021/22          |
| <b>WATER REVENUES</b>     |                    |                  |                  |                  |
| Water Sales Revenues      | \$3,050,110        | \$2,950,000      | \$2,750,000      | \$3,000,000      |
| <u>Other Revenues</u>     | <u>\$605,338</u>   | <u>\$476,550</u> | <u>\$456,550</u> | <u>\$456,550</u> |
| Total                     | \$3,655,448        | \$3,426,550      | \$3,206,550      | \$3,456,550      |
| <b>WATER EXPENSES</b>     |                    |                  |                  |                  |
| Operating                 | \$2,280,446        | \$2,516,581      | \$2,855,656      | \$2,982,962      |
| <u>Debt Service</u>       | <u>\$312,156</u>   | <u>\$313,906</u> | <u>\$315,156</u> | <u>\$318,344</u> |
| Subtotal                  | \$2,592,602        | \$2,830,487      | \$3,170,812      | \$3,301,305      |
| <b>TOTAL NET REVENUES</b> | <b>\$1,062,846</b> | <b>\$596,063</b> | <b>\$35,738</b>  | <b>\$155,245</b> |



### 2.3.6 Debt Service

The Water Utility currently has one outstanding debt obligation that is shared with the Sewer Utility – the 2015 Utility Revenue Bonds for \$8.3 million. Total debt service for 2022/23 is \$632,063, see Table 15. Debt service payments are split evenly between the Water Utility and Sewer Utility.

**Table 15: 2015 Utility Revenue Bonds - Debt Service Schedule  
City of Brisbane  
Water Utility Rate Study 2022**

| <b>Fiscal Year<br/>Ending June 30</b> | <b>Principal</b>   | <b>Interest</b>    | <b>Total Debt Service (1)</b> |
|---------------------------------------|--------------------|--------------------|-------------------------------|
| 2016                                  | \$170,000          | \$247,103          | \$417,103                     |
| 2017                                  | \$305,000          | \$327,763          | \$632,763                     |
| 2018                                  | \$310,000          | \$318,513          | \$628,513                     |
| 2019                                  | \$320,000          | \$304,313          | \$624,313                     |
| 2020                                  | \$340,000          | \$287,813          | \$627,813                     |
| 2021                                  | \$360,000          | \$270,313          | \$630,313                     |
| 2022                                  | \$385,000          | \$251,688          | \$636,688                     |
| 2023                                  | \$400,000          | \$232,063          | \$632,063                     |
| 2024                                  | \$415,000          | \$211,688          | \$626,688                     |
| 2025                                  | \$440,000          | \$190,313          | \$630,313                     |
| 2026                                  | \$455,000          | \$167,938          | \$622,938                     |
| 2027                                  | \$480,000          | \$149,363          | \$629,363                     |
| 2028                                  | \$490,000          | \$134,813          | \$624,813                     |
| 2029                                  | \$510,000          | \$119,175          | \$629,175                     |
| 2030                                  | \$525,000          | \$102,356          | \$627,356                     |
| 2031                                  | \$540,000          | \$84,713           | \$624,713                     |
| 2032                                  | \$570,000          | \$65,625           | \$635,625                     |
| 2033                                  | \$305,000          | \$50,313           | \$355,313                     |
| 2034                                  | \$320,000          | \$39,175           | \$359,175                     |
| 2035                                  | \$330,000          | \$23,063           | \$353,063                     |
| 2036                                  | <u>\$340,000</u>   | <u>\$6,375</u>     | <u>\$346,375</u>              |
| <b>TOTALS</b>                         | <b>\$8,310,000</b> | <b>\$3,584,471</b> | <b>\$11,894,471</b>           |

(1) Debt service is allocated 50% to the Water Utility and 50% to the Sewer Utility.

#### Debt Service Coverage

A chief covenant for the City to secure State loans/grants or revenue bonds/Certificates of Participation (COPs) is to maintain a specific debt service coverage ratio. A debt service coverage ratio is a financial measure of an agency’s ability to repay outstanding debt. For the 2015 Utility Revenue Bonds, the debt service coverage ratio means that annual water net revenues (gross revenues less operating and maintenance expenses) must be at least 1.25 times the combined annual debt service payments on all

parity obligations. Failure to meet the debt service coverage ratio on an annual basis is considered to be technical default, thereby making the revenue bonds/COPs callable or payable upon demand. Thus, rates and fees must be set to meet this legal requirement. Moreover, failing to meet debt service coverage may hinder the City's ability to qualify for future bond funding.

### **2.3.7 Water Cash Flow Objectives**

With input from City Staff, L&T developed three water cash flow scenarios based on various rate increase options. The following three goals are indicators of the overall fiscal health of the Water Utility, and the proposed rate adjustments for the rate scenarios have been designed to meet these objectives.

1. Meet debt service coverage (1.25x)
  - a. The debt service coverage ratio for the 2015 Utility Revenue Bonds is 1.25x.
  - b. Ratio is calculated as Net Operating Revenue/Total Debt Service.
2. Meet Water Utility reserve targets
  - a. Operating Reserve Target = 25.0% of annual operating costs
  - b. Drought Reserve Target = \$700,000
3. Maintain positive net operating revenues
  - a. To ensure that the Water Utility is covering its cost of service
  - b. To avoid an operating deficit and dipping into reserves

The three cash flow scenarios considered are:

- *Water Scenario #1: No Rate Increases*
  - This scenario demonstrates what would happen if the City did not raise the water rates. Without rate increases, the projections show that the Water Utility would not meet debt service coverage beginning in 2022/23. Additionally, the Water Utility would be operating in a deficit and would run down its reserves by the end of 2026/27.
- *Water Scenario #2: 8.0% Annual Rate Increases*
  - This scenario shows the impact to the Water Utility with 8.0% annual rate increases to cover operating cost inflation. With Scenario #2, the projections show that the Water Utility would not meet debt service coverage beginning in 2022/23. Additionally, the Water Utility would be operating in a deficit for the next 10 years.
- *Water Scenario #3: 9.0% Annual Rate Increases*
  - This scenario shows the impact to the Water Utility with annual 9.0% rate increases. With Scenario #3, the Water Utility would meet debt service coverage by 2024/25. The Water Utility would meet its reserve targets each year and would be maintaining positive net operating revenue by 2027/28.

### **2.3.8 Water Scenario #1: Water Cash Flow Projection with No Rate Increases**

Table 16 forecasts the financial health of the water utility over the next 10 years if the City does not implement any rate increases. Using 2021/22 as the base year, the cash flow for *Scenario #1* shows that the Water Utility will miss debt service coverage (line 54) and will have negative net operating

revenues beginning in 2022/23 (line 43). Additionally, the Water Utility will run down its reserves by the end of 2026/27 (line 45).

The cash flow uses the 2021/22 budget as the base year and includes the following assumptions:

#### Revenues

- Total Water Sales revenues are estimated at \$3.0 million based on the 2021/22 budget.
- Rate increases will go into effect on July 1 of each year, beginning in 2023 through 2027.
- Meter Connection Fees, Fire Service Charges, and Altamar Meter Reading Fee revenues are increased by the Overall Rate Adjustment percentage.
- Drought Charge remains in effect through 2026/27.
- The Capital Charge is increased by \$85,000 beginning in December 2022 and then \$170,000 in 2023/24. The total estimated increase in the Capital Charge is estimated at \$700,000 and is split evenly with the Sewer Utility.
- The Capital Charge will be increased again in 2027/28.
- Interest is increased by 1.0% each year.
- All other revenues are increased by 3.0% each year.
- The Low Income Rate Assistance contribution from the General Fund remains at \$75,000 per year and is divided evenly between water and sewer.
- Growth is estimated at 0.5% each year.
- Water consumption is based on 2020 usage and is projected to increase on average approximately 2.0% each year through 2027/28.

#### Expenses

- Expenses are increased based on the escalation factors from Table 12.
- The only current debt obligation is the 2015 Utility Revenue Bonds. Total debt service is approximately \$625,000 per year and is split evenly with the Sewer Utility.
- Debt service coverage is estimated at 1.25x and is calculated by dividing Net Revenues by Total Debt Service.
- Assuming that the City will issue \$5 million in debt to pay for capital projects in 2027/28, total debt service is projected at \$300,000 and is split evenly with the Sewer Utility beginning in 2027/28.
- No capital project expenditures are included.
- Annual depreciation is not included.





### 2.3.10 Water Scenario #3: Water Cash Flow Projection with 9.0% Annual Rate Increases

Water Scenario #3 includes the same assumptions for the Revenues and Expenses as Table 16 but includes rate increases of 9.0% per year to meet the three financial goals. With Scenario #3, the projections show that the Water Utility would meet debt service coverage beginning in 2023/24 (line 54). Additionally, the Water Utility will meet its reserve fund targets (line 45) and maintain positive net revenues for the next 10 years (line 43).

**Table 18: Scenario #3: 9% Annual Rate Increases - Water Cash Flow Projection**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|  | Budget<br>2021/22 | Projected<br>2022/23 | Years 1 - 5: Proposition 218 |             |             |             |             | Years 6 - 10: Extended Projection |             |             |             |             |
|--|-------------------|----------------------|------------------------------|-------------|-------------|-------------|-------------|-----------------------------------|-------------|-------------|-------------|-------------|
|  |                   |                      | 2023/24                      | 2024/25     | 2025/26     | 2026/27     | 2027/28     | 2028/29                           | 2029/30     | 2030/31     | 2031/32     | 2032/33     |
| 1 Overall Revenue Adjustment             |                   |                      | 9.0%                         | 9.0%        | 9.0%        | 9.0%        | 9.0%        | 8.0%                              | 8.0%        | 8.0%        | 8.0%        | 8.0%        |
| 2 Rate Increase Effective                |                   |                      | Jul 1, 2023                  | Jul 1, 2024 | Jul 1, 2025 | Jul 1, 2026 | Jul 1, 2027 | Jul 1, 2028                       | Jul 1, 2029 | Jul 1, 2030 | Jul 1, 2031 | Jul 1, 2032 |
| 5 BEGINNING FUND BALANCE                 | \$2,828,445       | \$2,983,640          | \$2,643,640                  | \$2,345,640 | \$2,088,640 | \$1,882,640 | \$1,725,640 | \$1,882,140                       | \$2,050,640 | \$2,234,140 | \$2,428,640 | \$2,622,140 |
| 7 REVENUES                               |                   |                      |                              |             |             |             |             |                                   |             |             |             |             |
| 8 Water Sales                            | 3,000,000         | 3,000,000            | 3,270,000                    | 3,564,000   | 3,885,000   | 4,235,000   | 4,616,000   | 4,985,000                         | 5,384,000   | 5,815,000   | 6,280,000   | 6,782,000   |
| 9 Meter Connection Fees                  | 20,000            | 20,000               | 22,000                       | 24,000      | 26,000      | 28,000      | 31,000      | 33,000                            | 36,000      | 39,000      | 42,000      | 45,000      |
| 10 Fire Service Charges                  | 115,000           | 115,000              | 125,000                      | 136,000     | 148,000     | 161,000     | 175,000     | 189,000                           | 204,000     | 220,000     | 238,000     | 257,000     |
| 11 Altamar Meter Reading Fee             | 7,500             | 8,000                | 9,000                        | 10,000      | 11,000      | 12,000      | 13,000      | 14,000                            | 15,000      | 16,000      | 17,000      | 18,000      |
| 12 Drought Reserve Charge                | 100,000           | 100,000              | 100,000                      | 100,000     | 100,000     | 100,000     | 0           | 0                                 | 0           | 0           | 0           | 0           |
| 13 Capital Charge (1)                    | 182,500           | 267,500              | 352,500                      | 352,500     | 352,500     | 352,500     | 502,500     | 502,500                           | 502,500     | 502,500     | 502,500     | 502,500     |
| 14 Investment Earnings                   | 25,000            | 25,000               | 25,000                       | 25,000      | 25,000      | 25,000      | 25,000      | 25,000                            | 25,000      | 25,000      | 25,000      | 25,000      |
| 15 Account Open/Reconnection Fees        | 1,500             | 2,000                | 2,000                        | 2,000       | 2,000       | 2,000       | 2,000       | 2,000                             | 2,000       | 2,000       | 2,000       | 2,000       |
| 16 Late Payment Charges                  | 5,000             | 5,000                | 5,000                        | 5,000       | 5,000       | 5,000       | 5,000       | 5,000                             | 5,000       | 5,000       | 5,000       | 5,000       |
| 17 Transfers from Other Funds            | 37,500            | 37,500               | 37,500                       | 37,500      | 37,500      | 37,500      | 37,500      | 37,500                            | 37,500      | 37,500      | 37,500      | 37,500      |
| 18 Less: Low Income Rate Assistance      | (37,500)          | (37,500)             | (37,500)                     | (37,500)    | (37,500)    | (37,500)    | (37,500)    | (37,500)                          | (37,500)    | (37,500)    | (37,500)    | (37,500)    |
| 19 Grant Revenue                         | 0                 | 0                    | 0                            | 0           | 0           | 0           | 0           | 0                                 | 0           | 0           | 0           | 0           |
| 20 Total Revenues                        | 3,456,500         | 3,542,500            | 3,910,500                    | 4,218,500   | 4,554,500   | 4,920,500   | 5,369,500   | 5,755,500                         | 6,173,500   | 6,624,500   | 7,111,500   | 7,636,500   |
| 22 EXPENSES                              |                   |                      |                              |             |             |             |             |                                   |             |             |             |             |
| 23 Operating & Maintenance               |                   |                      |                              |             |             |             |             |                                   |             |             |             |             |
| 24 Salaries                              | 499,125           | 519,000              | 540,000                      | 562,000     | 584,000     | 607,000     | 631,000     | 656,000                           | 682,000     | 709,000     | 737,000     | 766,000     |
| 25 Payroll Taxes                         | 7,112             | 7,000                | 7,000                        | 7,000       | 7,000       | 7,000       | 7,000       | 7,000                             | 7,000       | 7,000       | 7,000       | 7,000       |
| 26 Benefits                              | 277,746           | 289,000              | 301,000                      | 313,000     | 326,000     | 339,000     | 353,000     | 367,000                           | 382,000     | 397,000     | 413,000     | 430,000     |
| 27 Insurance                             | 58,938            | 65,000               | 68,000                       | 71,000      | 75,000      | 79,000      | 83,000      | 87,000                            | 91,000      | 96,000      | 101,000     | 106,000     |
| 28 Supplies and Services                 | 1,666,998         | 1,932,000            | 2,125,000                    | 2,338,000   | 2,572,000   | 2,829,000   | 3,112,000   | 3,423,000                         | 3,765,000   | 4,142,000   | 4,556,000   | 5,012,000   |
| 29 Admin Charges and Credit              | 473,044           | 487,000              | 502,000                      | 517,000     | 533,000     | 549,000     | 565,000     | 582,000                           | 599,000     | 617,000     | 636,000     | 655,000     |
| 30 Subtotal O&M                          | 2,982,962         | 3,299,000            | 3,543,000                    | 3,808,000   | 4,097,000   | 4,410,000   | 4,751,000   | 5,122,000                         | 5,526,000   | 5,968,000   | 6,450,000   | 6,976,000   |
| 32 Net Operating Revenue                 | 473,538           | 243,500              | 367,500                      | 410,500     | 457,500     | 510,500     | 618,500     | 633,500                           | 647,500     | 656,500     | 661,500     | 660,500     |
| 34 Debt Service                          |                   |                      |                              |             |             |             |             |                                   |             |             |             |             |
| 35 2015 Utility Bonds (2)                | 318,344           | 316,000              | 313,000                      | 315,000     | 311,000     | 315,000     | 312,000     | 315,000                           | 314,000     | 312,000     | 318,000     | 159,000     |
| 36 New Bonds                             | 0                 | 0                    | 0                            | 0           | 0           | 0           | 150,000     | 150,000                           | 150,000     | 150,000     | 150,000     | 150,000     |
| 37 Subtotal Debt Service                 | 318,344           | 316,000              | 313,000                      | 315,000     | 311,000     | 315,000     | 462,000     | 465,000                           | 464,000     | 462,000     | 468,000     | 309,000     |
| 39 Capital Projects                      | 0                 | 267,500              | 352,500                      | 352,500     | 352,500     | 352,500     | 0           | 0                                 | 0           | 0           | 0           | 0           |
| 41 Total Expenses                        | 3,301,305         | 3,882,500            | 4,208,500                    | 4,475,500   | 4,760,500   | 5,077,500   | 5,213,000   | 5,587,000                         | 5,990,000   | 6,430,000   | 6,918,000   | 7,285,000   |
| 43 Total Net Revenues                    | 155,195           | (340,000)            | (298,000)                    | (257,000)   | (206,000)   | (157,000)   | 156,500     | 168,500                           | 183,500     | 194,500     | 193,500     | 351,500     |
| 45 ENDING FUND BALANCE                   | 2,983,640         | 2,643,640            | 2,345,640                    | 2,088,640   | 1,882,640   | 1,725,640   | 1,882,140   | 2,050,640                         | 2,234,140   | 2,428,640   | 2,622,140   | 2,973,640   |
| 48 Reserve Funds                         |                   |                      |                              |             |             |             |             |                                   |             |             |             |             |
| 49 Operating Reserve Target (25% of O&M) | 745,700           | 824,800              | 885,800                      | 952,000     | 1,024,300   | 1,102,500   | 1,187,800   | 1,280,500                         | 1,381,500   | 1,492,000   | 1,612,500   | 1,744,000   |
| 50 Drought Reserve (\$700,000)           | 447,499           | 547,499              | 647,499                      | 747,499     | 847,499     | 947,499     | 947,499     | 947,499                           | 947,499     | 947,499     | 947,499     | 947,499     |
| 51 Total Water Reserves                  | 1,193,199         | 1,372,299            | 1,533,299                    | 1,699,499   | 1,871,799   | 2,049,999   | 2,135,299   | 2,227,999                         | 2,328,999   | 2,439,499   | 2,559,999   | 2,691,499   |
| 52 Target Met?                           | yes               | yes                  | yes                          | yes         | yes         | yes         | yes         | yes                               | yes         | yes         | yes         | yes         |
| 54 Debt Service Coverage - 1.25x (3)     | 1.49              | 0.77                 | 1.17                         | 1.30        | 1.47        | 1.62        | 1.34        | 1.36                              | 1.40        | 1.42        | 1.41        | 2.14        |
| 55 Target Met?                           | yes               | no                   | no                           | yes         | yes         | yes         | yes         | yes                               | yes         | yes         | yes         | yes         |

1 - Assumes Capital Charge will increase every 5 years. First increase will go into effect on Dec 1, 2022. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5M in new debt (combined water & sewer)  
 2 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.  
 3 - (Net Operating Revenue less Projected Grant Revenue) divided by (Total Debt Service)

### 2.3.11 Water Scenario Comparison

Table 19 includes a summary of the proposed rate adjustments and the three financial goals for all three scenarios. Based on the proposed rate adjustments, only *Water Scenario #3: 9.0% Annual Rate Increases* meets the three financial objectives by the end of the rate study period.

**Table 19: Water Scenario Comparison  
City of Brisbane  
Water Utility Rate Study 2022**

#### GOAL 1 : MEET DEBT SERVICE COVERAGE

|  | Budget<br>2021/22 | Projected<br>2022/23 | Proposed   |              |              |              |              |
|--|-------------------|----------------------|------------|--------------|--------------|--------------|--------------|
|  |                   |                      | 2023/24    | 2024/25      | 2025/26      | 2026/27      | 2027/28      |
| Debt Service Coverage Ratio Required                       | 1.25              | 1.25                 | 1.25       | 1.25         | 1.25         | 1.25         | 1.25         |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>        | 1.49<br>yes       | 0.77<br>no           | 0.27<br>no | (0.57)<br>no | (1.51)<br>no | (2.48)<br>no | (2.32)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i> | 1.49<br>yes       | 0.77<br>no           | 1.08<br>no | 1.09<br>no   | 1.12<br>no   | 1.12<br>no   | 0.87<br>no   |
| Scenario 3: 9% Annual Rate Increases<br><i>Target Met?</i> | 1.49<br>yes       | 0.77<br>no           | 1.17<br>no | 1.30<br>yes  | 1.47<br>yes  | 1.62<br>yes  | 1.34<br>yes  |

#### GOAL 2: MEET RESERVE FUND TARGETS

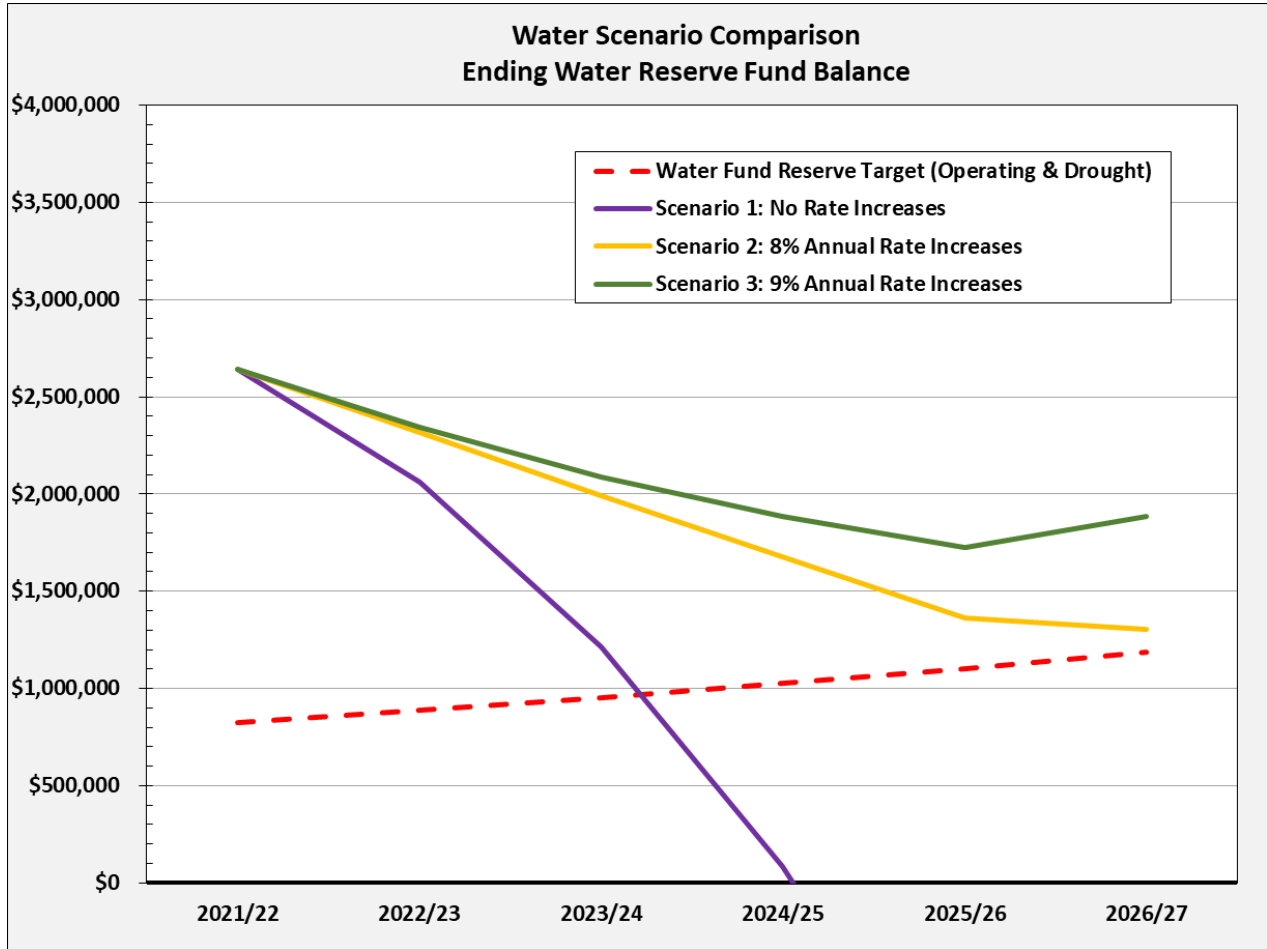
|  | Budget<br>2021/22  | Projected<br>2022/23 | Proposed           |                    |                     |                     |                     |
|--|--------------------|----------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
|  |                    |                      | 2023/24            | 2024/25            | 2025/26             | 2026/27             | 2027/28             |
| Water Fund Reserve Target (Operating & Drought)            | \$824,800          | \$885,800            | \$952,000          | \$1,024,300        | \$1,102,500         | \$1,187,800         | \$1,280,500         |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>        | \$2,643,640<br>yes | \$2,062,640<br>yes   | \$1,214,640<br>yes | \$81,640<br>no     | (\$1,368,360)<br>no | (\$2,903,860)<br>no | (\$4,813,360)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i> | \$2,643,640<br>yes | \$2,314,640<br>yes   | \$1,990,640<br>yes | \$1,675,640<br>yes | \$1,360,640<br>yes  | \$1,302,140<br>yes  | \$1,239,640<br>no   |
| Scenario 3: 9% Annual Rate Increases<br><i>Target Met?</i> | \$2,643,640<br>yes | \$2,345,640<br>yes   | \$2,088,640<br>yes | \$1,882,640<br>yes | \$1,725,640<br>yes  | \$1,882,140<br>yes  | \$2,050,640<br>yes  |

#### GOAL 3: POSITIVE TOTAL NET REVENUES

|  | Budget<br>2021/22 | Projected<br>2022/23 | Proposed          |                   |                     |                     |                     |
|--|-------------------|----------------------|-------------------|-------------------|---------------------|---------------------|---------------------|
|  |                   |                      | 2023/24           | 2024/25           | 2025/26             | 2026/27             | 2027/28             |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>        | \$155,195<br>yes  | (\$340,000)<br>no    | (\$581,000)<br>no | (\$848,000)<br>no | (\$1,133,000)<br>no | (\$1,450,000)<br>no | (\$1,535,500)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i> | \$155,195<br>yes  | (\$340,000)<br>no    | (\$329,000)<br>no | (\$324,000)<br>no | (\$315,000)<br>no   | (\$315,000)<br>no   | (\$58,500)<br>no    |
| Scenario 3: 9% Annual Rate Increases<br><i>Target Met?</i> | \$155,195<br>yes  | (\$340,000)<br>no    | (\$298,000)<br>no | (\$257,000)<br>no | (\$206,000)<br>no   | (\$157,000)<br>no   | \$156,500<br>yes    |

Figure 4 graphically shows the projected total ending reserve fund balance under each scenario. The red dotted line represents the total reserve fund target. The purple line represents *Water Scenario #1: No Rate Increases*. The yellow line represents *Water Scenario #2: 8.0% Annual Rate Increases*. The green line represents *Water Scenario #3: 9.0% Annual Rate Increases*. It is projected that the Water Fund will meet its reserve fund targets through 2026/27 in each scenario except for *Water Scenario #1*.

**Figure 4: Water Scenario Comparison - Ending Water Fund Reserve Fund Balance**  
**City of Brisbane**  
**Water Utility Rate Study 2022**





## 2.4 Water Cost Allocation

The water revenue requirement detailed in the previous section determines the amount of revenue to be recovered from water rates. The cost of service allocation determines how revenues will be recovered from customers based on how they use the water system. Proposition 218 requires that agencies providing “property-related services” (including water utility service) set rates and charges that are based on the cost of providing those services and are proportional to how customers use the system.

### 2.4.1 Overview of Water Cost of Service Methodology

The purpose of the cost allocation is to classify costs and to determine the amount of revenue that will be recovered from fixed rates and from consumption charges. The American Water Works Association (AWWA) recommends methods to classify costs among various customers. Using the Base-Extra Capacity Method as recommended by the AWWA, water operating expenses are allocated to the following categories: (a) *Base*, (b) *Extra*, (c) *Meters and Services*, and (d) *Customer Service*. The *Base* and *Extra* categories are intended to recover variable (consumption) costs, while the *Customer Service* and *Meters and Services* categories are intended to recover fixed expenses that are incurred regardless of water used.

- *Base*: Base costs include the expenses related to providing water under average, “base” demand conditions.
- *Extra*: The extra category includes costs related to providing water above the system average demand (ie. related to peak, “extra” usage).
- *Meters and Services*: These include costs related to maintaining and replacing water meters.
- *Customer Service*: This category contains costs associated with serving customers, such as billing and answering customer inquiries.

### 2.4.2 Cost Allocation

Table 20 provides the proposed cost allocation for the water utility based on input from City staff. Fiscal year 2022/23 is used as the test year for the cost allocation. Costs are allocated according to how they are incurred by the City. Based on Table 20, 15.5% of costs will be recovered from the Fixed Charges while the remaining 84.5% will be recovered from the Consumption Charges, which is in line with the current split (15.0% from Fixed Charges / 85.0% from Consumption Charges).

**Table 20: Water Cost Allocation  
City of Brisbane  
Water Utility Rate Study 2022**

| Operating Expense              | 2022/23 Budget   | FIXED CHARGES     |                  | CONSUMPTION CHARGES |              | Total         | Notes          |
|--------------------------------|------------------|-------------------|------------------|---------------------|--------------|---------------|----------------|
|                                |                  | Meters & Services | Customer Service | Base                | Extra        |               |                |
| Salaries                       | \$519,000        | 10%               | 10%              | 25%                 | 55%          | 100%          | Staff Estimate |
| Payroll Taxes                  | \$7,000          | 10%               | 10%              | 25%                 | 55%          | 100%          | Staff Estimate |
| Benefits                       | \$289,000        | 10%               | 10%              | 25%                 | 55%          | 100%          | Staff Estimate |
| Insurance (2)                  | \$65,000         | 10%               | 10%              | 25%                 | 55%          | 100%          | Staff Estimate |
| Supplies and Services          | \$1,932,000      | 2%                | 2%               | 25%                 | 71%          | 100%          | Peaking        |
| Admin Charges and Credits      | \$487,000        | 25%               | 25%              | 25%                 | 25%          | 100%          | Even           |
| <u>Debt Service</u>            | <u>\$316,000</u> | <u>10%</u>        | <u>10%</u>       | <u>25%</u>          | <u>55%</u>   | <u>100%</u>   | Staff Estimate |
| Total Water Operating Expenses | \$3,615,000      | \$280,000         | \$280,000        | \$903,800           | \$2,151,300  | \$3,615,100   |                |
| <b>Total Allocation %</b>      |                  | <b>7.8%</b>       | <b>7.8%</b>      | <b>25.0%</b>        | <b>59.5%</b> | <b>100.0%</b> |                |

## 2.5 Water Rate Design Considerations

Following the allocation of costs, the next step is to derive the total cost responsibility for each customer class by developing unit costs of service for each cost function and then assigning those costs to the customer classes based on the respective service requirements of each.

### 2.5.1 Rate Structure Modifications

The proposed modifications to the existing water rate structure are as follows:

- **Fixed Charges**
  - All customer classes will be charged the same Fixed Charges which will vary by meter size.
    - L&T recommends developing a single fixed rate structure based on meter size that applies to all customer classes. Additionally, we propose to use the AWWA meter capacity ratios to calculate rates for the larger meter sizes. The re-alignment will amend the fixed charges so that each meter size will be charged based on their proportional impact on the system.
  - All customers will receive 1 unit of water with the Fixed Charges.
    - Currently, only customers with a 5/8" meter receive 1 unit of water with the Fixed Charges. To comply with Proposition 218, L&T recommends that the City extend the 1 ccf water allotment to all customers.



### **Consumption Charges**

- All Customers --> Transition to a two-tiered rate structure
  - Proposed Bimonthly Tiers:
    - Tier 1: 1- 20 ccf
    - Tier 2: Over 20 ccf
  - To comply with Proposition 218, each water rate tier breakpoint (i.e. the consumption used in each tier) and the price of each tier must be individually cost-justified. Higher use must be directly tied to specific costs such as imported water, higher electricity costs associated with peak pumping, increased maintenance, and/or conservation programs. Tiers can no longer be assigned to customers solely based on conservation objectives. For example, public agencies may not arbitrarily raise the price of higher use tiers in order to offer a discount to lower water users.
  - Based on input from the Infrastructure, Utilities, & Franchise Subcommittee, the first tier will be set at 20 ccf per two-month billing period. The current average bimonthly use for residential customers is 10 ccf.

### **2.5.2 Projected Customer Growth & Water Consumption**

Table 21 estimates water consumption by customer class for the next 5 years using 2019/20 usage data as a baseline. The table also shows the estimated reduction in billed consumption with the proposed 1 ccf allotment for all customers. The estimated billed consumption is used to determine the unit costs for water consumption charges. For 2022/23, total consumption is projected at 289,715 ccf. However, 11,602 ccf will be unbilled as the proposed Fixed Charge will include 1 ccf of water for all customers. Therefore, the total amount of billed water is 278,113 ccf.

**Table 21: Projected Water Consumption with 1 Unit Allotment  
City of Brisbane  
Water Utility Rate Study 2022**

|  | CURRENT        | PROJECTED      |                |                | PROJECTED - RATE STUDY PERIOD |                |                |                |                |
|--|----------------|----------------|----------------|----------------|-------------------------------|----------------|----------------|----------------|----------------|
|  | 2019/20        | 2020/21        | 2021/22        | 2022/23        | 2023/24                       | 2024/25        | 2025/26        | 2026/27        | 2027/28        |
| <b>Residential</b>   |                |                |                |                |                               |                |                |                |                |
| <i>Annual Increase %</i>                                   |                | 0.0%           | 0.0%           | 1.0%           | 1.0%                          | 1.0%           | 1.0%           | 1.0%           | 1.0%           |
| Annual Consumption (ccf)                                   | 109,065        | 109,065        | 109,065        | 110,156        | 111,257                       | 112,370        | 113,493        | 114,628        | 115,775        |
| <u>Less 1 ccf Allotment</u>                                | <u>9,655</u>   | <u>9,655</u>   | <u>9,655</u>   | <u>9,752</u>   | <u>9,849</u>                  | <u>9,948</u>   | <u>10,047</u>  | <u>10,148</u>  | <u>10,249</u>  |
| Total Consumption for Consumption Charges                  | 99,410         | 99,410         | 99,410         | 100,404        | 101,408                       | 102,422        | 103,446        | 104,481        | 105,526        |
| <b>Commercial</b>  |                |                |                |                |                               |                |                |                |                |
| <i>Annual Increase %</i>                                   |                | 0.0%           | 0.0%           | 3.0%           | 3.0%                          | 3.0%           | 3.0%           | 3.0%           | 3.0%           |
| Annual Consumption (ccf)                                   | 95,700         | 95,700         | 95,700         | 98,571         | 101,528                       | 104,574        | 107,711        | 110,943        | 114,271        |
| <u>Less 1 ccf Allotment</u>                                | <u>1,400</u>   | <u>1,400</u>   | <u>1,400</u>   | <u>1,442</u>   | <u>1,485</u>                  | <u>1,530</u>   | <u>1,576</u>   | <u>1,623</u>   | <u>1,672</u>   |
| Total Consumption for Consumption Charges                  | 94,300         | 94,300         | 94,300         | 97,129         | 100,043                       | 103,044        | 106,135        | 109,320        | 112,599        |
| <b>Irrigation</b>  |                |                |                |                |                               |                |                |                |                |
| <i>Annual Increase %</i>                                   |                | 0.0%           | 0.0%           | 2.0%           | 2.0%                          | 2.0%           | 2.0%           | 2.0%           | 2.0%           |
| Annual Consumption (ccf)                                   | 79,400         | 79,400         | 79,400         | 80,988         | 82,608                        | 84,260         | 85,945         | 87,664         | 89,417         |
| <u>Less 1 ccf Allotment</u>                                | <u>400</u>     | <u>400</u>     | <u>400</u>     | <u>408</u>     | <u>416</u>                    | <u>424</u>     | <u>433</u>     | <u>442</u>     | <u>450</u>     |
| Total Consumption for Consumption Charges                  | 79,000         | 79,000         | 79,000         | 80,580         | 82,192                        | 83,835         | 85,512         | 87,222         | 88,967         |
| <b>Total Consumption</b>                                   |                |                |                |                |                               |                |                |                |                |
| Total Consumption  | 284,165        | 284,165        | 284,165        | 289,715        | 295,393                       | 301,204        | 307,150        | 313,235        | 319,463        |
| <u>Less 1 ccf Allotment</u>                                | <u>11,455</u>  | <u>11,455</u>  | <u>11,455</u>  | <u>11,602</u>  | <u>11,750</u>                 | <u>11,902</u>  | <u>12,056</u>  | <u>12,212</u>  | <u>12,371</u>  |
| <b>TOTAL CONSUMPTION (CCF)<br/>FOR CONSUMPTION CHARGES</b> | <b>272,710</b> | <b>272,710</b> | <b>272,710</b> | <b>278,113</b> | <b>283,643</b>                | <b>289,302</b> | <b>295,094</b> | <b>301,023</b> | <b>307,092</b> |

1 - The May 25, 2021 memo prepared by Jerry Flanagan shows projected SFPUC water purchases in 2025 to be 435,800 ccf/year, representing a 44.3% increase from the 2020 total water purchases of 302,003 ccf. His projections assume that Biotech Developments in Sierra Point will be built out by 2025 and does not include the UPC parcel at Sierra Point nor the future Baylands Development.

Table 22 shows a projection of water meters, meter equivalents, and consumption for the rate study period. The number of meter equivalents is based on the total number of meters (Table 4) and the ratio of each meter size to that of the 5/8" meter. The amount of consumption that will be billed under the consumption charges is taken from Table 21 and is divided between Tier 1 and Tier 2 based on the City's bimonthly billing data history. The number of customers is estimated to increase at 0.5% each year. Residential consumption is conservatively estimated to increase 1.0% each year. Commercial consumption is estimated to increase by 3.0% each year. Irrigation consumption is increased each year by 2.0%.

**Table 22: Projected Customer Growth & Water Consumption**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|  | CURRENT<br>2019/20 | PROJECTED      |                |                | PROJECTED - RATE STUDY PERIOD |                |                |                |                |
|--|--------------------|----------------|----------------|----------------|-------------------------------|----------------|----------------|----------------|----------------|
|  |                    | 2020/21        | 2021/22        | 2022/23        | 2023/24                       | 2024/25        | 2025/26        | 2026/27        | 2027/28        |
| <b>NUMBER OF METERS</b>                  |                    |                |                |                |                               |                |                |                |                |
| Growth Increase %                        |                    | 0.00%          | 0.00%          | 0.50%          | 0.50%                         | 0.50%          | 0.50%          | 0.50%          | 0.50%          |
| Total Water Meters                       | 2,038              | 2,038          | 2,038          | 2,048          | 2,058                         | 2,069          | 2,079          | 2,089          | 2,090          |
| Total Meter<br>Equivalents               | 3,259              | 3,259          | 3,259          | 3,275          | 3,292                         | 3,308          | 3,325          | 3,341          | 3,358          |
| <b>WATER CONSUMPTION</b>                 |                    |                |                |                |                               |                |                |                |                |
| <b>Residential</b>                       |                    |                |                |                |                               |                |                |                |                |
| <u>Annual Increase % Consumption</u>     |                    | 0.0%           | 0.0%           | 1.0%           | 1.0%                          | 1.0%           | 1.0%           | 1.0%           | 1.0%           |
| Tier 1: 1 - 20 ccf                       | 86,634             | 86,634         | 86,634         | 87,501         | 88,376                        | 89,259         | 90,152         | 91,054         | 91,964         |
| Tier 2: Over 20 ccf                      | <u>12,776</u>      | <u>12,776</u>  | <u>12,776</u>  | <u>12,903</u>  | <u>13,032</u>                 | <u>13,163</u>  | <u>13,294</u>  | <u>13,427</u>  | <u>13,562</u>  |
| Subtotal Residential                     | 99,410             | 99,410         | 99,410         | 100,404        | 101,408                       | 102,422        | 103,446        | 104,481        | 105,526        |
| <b>Commercial</b>                        |                    |                |                |                |                               |                |                |                |                |
| <u>Annual Increase % Consumption (1)</u> |                    | 0.0%           | 0.0%           | 3.0%           | 3.0%                          | 3.0%           | 3.0%           | 3.0%           | 3.0%           |
| Tier 1: 1 - 20 ccf                       | 26,948             | 26,948         | 26,948         | 27,757         | 28,590                        | 29,447         | 30,331         | 31,241         | 32,178         |
| Tier 2: Over 20 ccf                      | <u>67,352</u>      | <u>67,352</u>  | <u>67,352</u>  | <u>69,372</u>  | <u>71,453</u>                 | <u>73,597</u>  | <u>75,805</u>  | <u>78,079</u>  | <u>80,421</u>  |
| Subtotal Commercial                      | 94,300             | 94,300         | 94,300         | 97,129         | 100,043                       | 103,044        | 106,135        | 109,320        | 112,599        |
| <b>Irrigation</b>                        |                    |                |                |                |                               |                |                |                |                |
| <u>Annual Increase % Consumption</u>     |                    | 0.0%           | 0.0%           | 2.0%           | 2.0%                          | 2.0%           | 2.0%           | 2.0%           | 2.0%           |
| Tier 1: 1 - 20 ccf                       | 12,344             | 12,344         | 12,344         | 12,591         | 12,843                        | 13,100         | 13,362         | 13,629         | 13,902         |
| Tier 2: Over 20 ccf                      | <u>66,656</u>      | <u>66,656</u>  | <u>66,656</u>  | <u>67,989</u>  | <u>69,349</u>                 | <u>70,736</u>  | <u>72,150</u>  | <u>73,593</u>  | <u>75,065</u>  |
| Subtotal Irrigation                      | 79,000             | 79,000         | 79,000         | 80,580         | 82,192                        | 83,835         | 85,512         | 87,222         | 88,967         |
| <b>Total Consumption</b>                 |                    |                |                |                |                               |                |                |                |                |
| <u>Annual Increase % Consumption</u>     |                    | 0.0%           | 0.0%           | 2.0%           | 2.0%                          | 2.0%           | 2.0%           | 2.0%           | 2.0%           |
| Tier 1: 1 - 20 ccf                       | 125,927            | 125,927        | 125,927        | 127,849        | 129,808                       | 131,807        | 133,845        | 135,923        | 138,044        |
| Tier 2: Over 20 ccf                      | <u>146,783</u>     | <u>146,783</u> | <u>146,783</u> | <u>150,264</u> | <u>153,834</u>                | <u>157,495</u> | <u>161,249</u> | <u>165,099</u> | <u>169,048</u> |
| Total Consumption                        | 272,710            | 272,710        | 272,710        | 278,113        | 283,643                       | 289,302        | 295,094        | 301,023        | 307,092        |

1 - The May 25, 2021 memo prepared by Jerry Flanagan shows projected SFPUC water purchases in 2025 to be 435,800 ccf/year, representing a 44.3% increase from the 2020 total water purchases of 302,003 ccf. His projections assume that Biotech Developments in Sierra Point will be built out by 2025 and does not include the UPC parcel at Sierra Point nor the future Baylands Development

## 2.6 Water Rate Design for Water Scenario #3

### 2.6.1 Current Water Rate Revenues - Fixed vs. Consumption Revenue Recovery

Table 23 summarizes the percentage of service charge revenues derived from the Fixed Charges versus the Consumption Charges. On average, the City collects roughly 15.0% of revenues from the Fixed Charges and 85.0% from the Consumption Charge. Based on input from staff, the City would like to maintain the current 15% fixed / 85% variable revenue recovery because the largest expense for the Water Utility is wholesale water purchases from SFPUC.

**Table 23: Current Water Sales - Fixed vs. Variable Water Service Revenue**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|   | Fixed Charges    | Consumption Charges | Total Water Sales Revenues |
|---|------------------|---------------------|----------------------------|
| <b>Total Revenues City vs. GVMID</b>    |                  |                     |                            |
| City                                    | \$283,555        | \$1,351,795         | \$1,635,350                |
| <u>GVMID</u>                            | <u>\$198,935</u> | <u>\$1,410,981</u>  | <u>\$1,609,916</u>         |
| Total Water Sales Revenues              | \$482,490        | \$2,762,776         | \$3,245,267                |
| <i>% of Total</i>                       | 14.9%            | 85.1%               | 100.0%                     |
| <b>Total Revenues by Customer Class</b> |                  |                     |                            |
| Residential                             | \$261,029        | \$735,794           | \$996,824                  |
| Commercial                              | \$179,813        | \$1,010,745         | \$1,190,557                |
| <u>Irrigation</u>                       | <u>\$41,648</u>  | <u>\$1,016,237</u>  | <u>\$1,057,886</u>         |
| Total Water Sales Revenues              | \$482,490        | \$2,762,776         | \$3,245,267                |
| <i>% of Total</i>                       | 14.9%            | 85.1%               | 100.0%                     |

Source: Utility Billing Data 2018-202 Water & sewer Export

### 2.6.2 Water Scenario #3: Annual Revenue Requirement Allocation

Table 24 shows the annual revenue requirement for *Scenario #3: 9.0% Annual Rate Increases* for the rate study period based on the cost allocation percentages from Table 20 and the total water rate revenue requirements for each year from the cash flow projection (Table 18). The fixed charge revenue requirement is based on the *Meters and Services* and *Customer Service* categories from the cost allocation. The consumption charge revenue requirement is based on the *base* and *extra* categories.

**Table 24: Annual Revenue Requirement Allocation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|                                      | Cost Allocation % | PROJECTED - RATE STUDY PERIOD |                    |                    |                    |                    |
|--------------------------------------|-------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                      |                   | 2023/24                       | 2024/25            | 2025/26            | 2026/27            | 2027/28            |
| <b>Total Revenue Requirement (1)</b> |                   | \$3,270,000                   | \$3,564,000        | \$3,885,000        | \$4,235,000        | \$4,616,000        |
| <b>FIXED CHARGES</b>                 |                   |                               |                    |                    |                    |                    |
| Meters & Services                    | 7.8%              | \$253,425                     | \$276,210          | \$301,088          | \$328,213          | \$357,740          |
| <u>Customer Service Charge</u>       | <u>7.8%</u>       | <u>\$253,425</u>              | <u>\$276,210</u>   | <u>\$301,088</u>   | <u>\$328,213</u>   | <u>\$357,740</u>   |
| Total Fixed Charges                  | 15.5%             | \$506,850                     | \$552,420          | \$602,175          | \$656,425          | \$715,480          |
| <b>CONSUMPTION CHARGES</b>           |                   |                               |                    |                    |                    |                    |
| Base                                 | 25.0%             | \$817,500                     | \$891,000          | \$971,250          | \$1,058,750        | \$1,154,000        |
| <u>Extra</u>                         | <u>59.5%</u>      | <u>\$1,945,977</u>            | <u>\$2,120,936</u> | <u>\$2,311,964</u> | <u>\$2,520,249</u> | <u>\$2,746,982</u> |
| Total Consumption Charges            | 84.5%             | \$2,763,477                   | \$3,011,936        | \$3,283,214        | \$3,578,999        | \$3,900,982        |
| <b>TOTAL</b>                         | 100.0%            | \$3,270,327                   | \$3,564,356        | \$3,885,389        | \$4,235,424        | \$4,616,462        |

1 - From Cash Flow (Table 18, line 5)

### 2.6.3 Water Scenario #3: Water Fixed Charge Derivation

The rate derivation for the Fixed Charges is shown on Table 25. The total revenue requirement for *Meter and Services* are divided by the *Total Number of Meter Equivalents*. *Customer Service* costs are divided amongst the *Total Number of Meters*. These two categories are then combined into a single bimonthly Fixed Charge that increases based on meter size.

For 2023/24, the proposed meter equivalent charge \$12.83 is multiplied by the corresponding meter equivalent ratio to calculate a charge for each meter size. The customer service charge of \$20.52 is added to the meter equivalent charge to derive a total fixed meter charge. The proposed total bimonthly Fixed Charge for a 5/8" or 3/4" meter is \$33.35 for 2023/24.

**Table 25: Water Fixed Charge Derivation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|   |                   | PROJECTED - RATE STUDY PERIOD |                  |                  |                  |                  |          |
|---|-------------------|-------------------------------|------------------|------------------|------------------|------------------|----------|
|   |                   | 2023/24                       | 2024/25          | 2025/26          | 2026/27          | 2027/28          |          |
| <b>REVENUE REQUIREMENT</b>                        |                   |                               |                  |                  |                  |                  |          |
| Meters & Services                                 |                   | \$253,425                     | \$276,210        | \$301,088        | \$328,213        | \$357,740        |          |
| <u>Customer Service Charge</u>                    |                   | <u>\$253,425</u>              | <u>\$276,210</u> | <u>\$301,088</u> | <u>\$328,213</u> | <u>\$357,740</u> |          |
| Total Fixed Charge Revenue Requirement            |                   | \$506,850                     | \$552,420        | \$602,175        | \$656,425        | \$715,480        |          |
| <b>METER EQUIVALENT CHARGE</b>                    |                   |                               |                  |                  |                  |                  |          |
| Total Meter Equivalent Charge Revenue Requirement |                   | \$253,425                     | \$276,210        | \$301,088        | \$328,213        | \$357,740        |          |
| <u>Total Number of Meter Equivalents</u>          |                   | <u>3,292</u>                  | <u>3,308</u>     | <u>3,325</u>     | <u>3,341</u>     | <u>3,358</u>     |          |
| Total Meter Equivalent Charge                     |                   | \$12.83                       | \$13.92          | \$15.09          | \$16.37          | \$17.76          |          |
| Meter Equivalent Charge by Meter Size             |                   |                               |                  |                  |                  |                  |          |
|   | <u>Meter Size</u> | <u>Meter Ratio</u>            |                  |                  |                  |                  |          |
|   | 5/8"              | 1.00                          | \$12.83          | \$13.92          | \$15.09          | \$16.37          | \$17.76  |
|   | 3/4"              | 1.00                          | \$12.83          | \$13.92          | \$15.09          | \$16.37          | \$17.76  |
|   | 1"                | 1.67                          | \$21.38          | \$23.20          | \$25.15          | \$27.28          | \$29.60  |
|   | 1-1/2"            | 3.33                          | \$42.77          | \$46.40          | \$50.30          | \$54.57          | \$59.20  |
|   | 2"                | 5.33                          | \$68.43          | \$74.24          | \$80.48          | \$87.31          | \$94.72  |
|   | 3"                | 10.67                         | \$136.85         | \$148.48         | \$160.96         | \$174.61         | \$189.44 |
|   | 4"                | 16.67                         | \$213.83         | \$232.00         | \$251.50         | \$272.83         | \$296.00 |
|   | 6"                | 33.33                         | \$427.67         | \$464.00         | \$503.00         | \$545.67         | \$592.00 |
| <b>CUSTOMER SERVICE CHARGE</b>                    |                   |                               |                  |                  |                  |                  |          |
| Total Customer Service Charge Revenue Requirement |                   | \$253,425                     | \$276,210        | \$301,088        | \$328,213        | \$357,740        |          |
| <u>Total Number of Meters</u>                     |                   | <u>2,058</u>                  | <u>2,069</u>     | <u>2,079</u>     | <u>2,089</u>     | <u>2,090</u>     |          |
| Total Customer Service Charge per Account         |                   | \$20.52                       | \$22.25          | \$24.14          | \$26.18          | \$28.52          |          |
| <b>TOTAL BIMONTHLY FIXED CHARGE (1)</b>           |                   |                               |                  |                  |                  |                  |          |
|   | <u>Meter Size</u> |                               |                  |                  |                  |                  |          |
|   | 5/8"              |                               | \$33.35          | \$36.17          | \$39.23          | \$42.55          | \$46.28  |
|   | 3/4"              |                               | \$33.35          | \$36.17          | \$39.23          | \$42.55          | \$46.28  |
|   | 1"                |                               | \$41.90          | \$45.45          | \$49.29          | \$53.46          | \$58.12  |
|   | 1-1/2"            |                               | \$63.29          | \$68.65          | \$74.44          | \$80.75          | \$87.72  |
|   | 2"                |                               | \$88.95          | \$96.49          | \$104.62         | \$113.49         | \$123.24 |
|   | 3"                |                               | \$157.37         | \$170.73         | \$185.10         | \$200.79         | \$217.96 |
|   | 4"                |                               | \$234.35         | \$254.25         | \$275.64         | \$299.01         | \$324.52 |
|   | 6"                |                               | \$448.19         | \$486.25         | \$527.14         | \$571.85         | \$620.52 |

1 - Total Bimonthly Fixed Charge is the sum of the "Meter Equivalent Charge" by meter size plus the "Total Customer Service Charge per Account"



### 2.6.4 Water Scenario #3: Consumption Charge Derivation

Consumption charges are calculated based on the revenue requirements derived in Table 24 and the projected total consumption per tier calculated in Table 22. The revenue requirement for each year is divided by the projected consumption to derive a per unit cost, see Table 26. The *Base* revenue requirement is used for Tier 1 and the *Extra* revenue requirement is used for Tier 2. For 2023/24, the proposed rates are \$6.30 per ccf for Tier 1 and \$12.65 per ccf for Tier 2.

**Table 26: Consumption Charge Rate Derivation**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|  | PROJECTED - RATE STUDY PERIOD |                    |                    |                    |                    |
|--|-------------------------------|--------------------|--------------------|--------------------|--------------------|
|  | 2023/24                       | 2024/25            | 2025/26            | 2026/27            | 2027/28            |
| <b>REVENUE REQUIREMENT</b>                   |                               |                    |                    |                    |                    |
| Base Charge Revenue Requirement              | \$817,500                     | \$891,000          | \$971,250          | \$1,058,750        | \$1,154,000        |
| <u>Extra Charge Revenue Requirement</u>      | <u>\$1,945,977</u>            | <u>\$2,120,936</u> | <u>\$2,311,964</u> | <u>\$2,520,249</u> | <u>\$2,746,982</u> |
| Total Consumption Charge Revenue Requirement | \$2,763,477                   | \$3,011,936        | \$3,283,214        | \$3,578,999        | \$3,900,982        |
| <b>CONSUMPTION CHARGE DERIVATION</b>         |                               |                    |                    |                    |                    |
| <b>All Customers</b>                         |                               |                    |                    |                    |                    |
| Tier 1 Revenue Requirement                   | \$817,500                     | \$891,000          | \$971,250          | \$1,058,750        | \$1,154,000        |
| <u>Tier 1: 1-20 ccf Consumption (ccf)</u>    | <u>129,808</u>                | <u>131,807</u>     | <u>133,845</u>     | <u>135,923</u>     | <u>138,044</u>     |
| Tier 1 Rate per ccf                          | <b>\$6.30</b>                 | <b>\$6.76</b>      | <b>\$7.26</b>      | <b>\$7.79</b>      | <b>\$8.36</b>      |
| Tier 2 Revenue Requirement                   | \$1,945,977                   | \$2,120,936        | \$2,311,964        | \$2,520,249        | \$2,746,982        |
| <u>Tier 2: Over 20 ccf Consumption (ccf)</u> | <u>153,834</u>                | <u>157,495</u>     | <u>161,249</u>     | <u>165,099</u>     | <u>169,048</u>     |
| Tier 2 Rate per ccf                          | <b>\$12.65</b>                | <b>\$13.47</b>     | <b>\$14.34</b>     | <b>\$15.27</b>     | <b>\$16.25</b>     |

### 2.6.5 Water Scenario #3: Proposed 5-Year Schedule of Rates

Table 27 summarizes the proposed bimonthly water rates. All customers including residential, commercial, and irrigation customers are proposed to be charged according to the proposed rate schedule shown. The first rate change is proposed to take effect on July 1, 2023, with subsequent rate increases each July 1 through 2027.

**Table 27: Proposed Bimonthly Water Rates  
City of Brisbane  
Water Utility Rate Study 2022**

|  | RATE STUDY PERIOD |                 |                 |                 |                 |
|--|-------------------|-----------------|-----------------|-----------------|-----------------|
|  | July 1,<br>2023   | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>FIXED CHARGES</b>                         |                   |                 |                 |                 |                 |
| <u>Meter Size</u>                            |                   |                 |                 |                 |                 |
| 5/8"   | \$33.35           | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| 3/4"   | \$33.35           | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| 1"   | \$41.90           | \$45.45         | \$49.29         | \$53.46         | \$58.12         |
| 1-1/2"                                       | \$63.29           | \$68.65         | \$74.44         | \$80.75         | \$87.72         |
| 2"   | \$88.95           | \$96.49         | \$104.62        | \$113.49        | \$123.24        |
| 3"   | \$157.37          | \$170.73        | \$185.10        | \$200.79        | \$217.96        |
| 4"   | \$234.35          | \$254.25        | \$275.64        | \$299.01        | \$324.52        |
| 6"   | \$448.19          | \$486.25        | \$527.14        | \$571.85        | \$620.52        |
| <b>CONSUMPTION CHARGES (per ccf)<br/>(1)</b> |                   |                 |                 |                 |                 |
| <u>All Customers (Usage over 1 ccf)</u>      |                   |                 |                 |                 |                 |
| Tier 1: 1- 20 ccf                            | \$6.30            | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 2: Over 20 ccf                          | \$12.65           | \$13.47         | \$14.34         | \$15.27         | \$16.25         |

1 - 1 ccf (hundred cubic feet) = 748 gallons

### 2.6.6 Scenario #3: Water Bill Impacts

For FY 2023/24, the proposed 9.0% revenue adjustment in the cash flow does not directly correlate to a 9.0% increase in rates due to the cost of service reallocation and the updated rate structure. Because of the reallocation, the bill impacts to customers for the first year will vary based on customer class, meter size, and actual consumption. Moreover, water consumption, particularly for single family customers, typically varies due to seasonal variations in weather and/or other factors. Hence, a single customer could face a range of impacts throughout the year. Table 28 includes a sample of bill impacts for residential, commercial, and irrigation customers at different levels of water use.

**Table 28: Sample Bimonthly Water Bill Impacts**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

#### RESIDENTIAL BILL IMPACTS - 5/8" METER

|                                       | Bimonthly<br>Use (ccf) | Current<br>Bill | Proposed        |                 |                 |                 |                 |
|---------------------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                       |                        |                 | July 1,<br>2023 | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>Residential: 5/8" meter, 1 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"             |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                    |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 1 ccf                     | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 2 - 3 ccf                     | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 3: 3 ccf                         | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 4: 4 - 8 ccf                     | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 5: 9 - 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 6: Over 16 ccf                   | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge           | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Total Bimonthly Water Bill            |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| \$ Change                             |                        |                 | \$10.68         | \$2.82          | \$3.06          | \$3.32          | \$3.73          |
| % Change                              |                        |                 | 47.1%           | 8.5%            | 8.5%            | 8.5%            | 8.8%            |
| <b>Residential: 5/8" meter, 4 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"             |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                    |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 1 ccf                     | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 2 - 3 ccf                     | 1                      | \$2.17          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 3: 3 ccf                         | 1                      | \$5.63          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 4: 4 - 8 ccf                     | 1                      | \$7.00          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 5: 9 - 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 6: Over 16 ccf                   | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge           | 4                      | \$14.80         | \$18.89         | \$20.28         | \$21.77         | \$23.37         | \$25.08         |
| Total Bimonthly Water Bill            |                        | \$37.47         | \$52.24         | \$56.45         | \$61.00         | \$65.92         | \$71.36         |
| \$ Change                             |                        |                 | \$14.77         | \$4.21          | \$4.55          | \$4.92          | \$5.44          |
| % Change                              |                        |                 | 39.4%           | 8.1%            | 8.1%            | 8.1%            | 8.3%            |

|  | Bimonthly<br>Use (ccf) | Current<br>Bill | Proposed        |                 |                 |                 |                 |
|--|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  |                        |                 | July 1,<br>2023 | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>Residential: 5/8" meter, 10 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 1 ccf                      | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 2 - 3 ccf                      | 1                      | \$2.17          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 3: 3 ccf                          | 1                      | \$5.63          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 4: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 5: 9 - 16 ccf                     | 2                      | \$17.38         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 6: Over 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge            | 10                     | \$60.18         | \$56.68         | \$60.84         | \$65.31         | \$70.10         | \$75.24         |
| Total Bimonthly Water Bill             |                        | \$82.85         | \$90.03         | \$97.01         | \$104.54        | \$112.65        | \$121.52        |
| \$ Change                              |                        |                 | \$7.18          | \$6.98          | \$7.53          | \$8.11          | \$8.86          |
| % Change                               |                        |                 | 8.7%            | 7.8%            | 7.8%            | 7.8%            | 7.9%            |
| <b>Residential: 5/8" meter, 20 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 1 ccf                      | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 2 - 3 ccf                      | 1                      | \$2.17          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 3: 3 ccf                          | 1                      | \$5.63          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 4: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 5: 9 - 16 ccf                     | 8                      | \$69.52         | \$50.38         | \$54.08         | \$58.05         | \$62.31         | \$66.88         |
| Tier 6: Over 16 ccf                    | 4                      | \$44.20         | \$25.19         | \$27.04         | \$29.03         | \$31.16         | \$33.44         |
| Subtotal Consumption Charge            | 20                     | \$156.52        | \$119.66        | \$128.44        | \$137.87        | \$148.00        | \$158.83        |
| Total Bimonthly Water Bill             |                        | \$179.19        | \$153.01        | \$164.61        | \$177.10        | \$190.55        | \$205.11        |
| \$ Change                              |                        |                 | (\$26.18)       | \$11.60         | \$12.50         | \$13.44         | \$14.57         |
| % Change                               |                        |                 | -14.6%          | 7.6%            | 7.6%            | 7.6%            | 7.6%            |
| <b>Residential: 5/8" meter, 40 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 1 ccf                      | 1                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 2 - 3 ccf                      | 1                      | \$2.17          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 3: 3 ccf                          | 1                      | \$5.63          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 4: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 5: 9 - 16 ccf                     | 8                      | \$69.52         | \$50.38         | \$54.08         | \$58.05         | \$62.31         | \$66.88         |
| Tier 6: Over 16 ccf                    | 24                     | \$265.20        | \$278.19        | \$296.37        | \$315.78        | \$336.46        | \$358.43        |
| Subtotal Consumption Charge            | 40                     | \$377.52        | \$372.65        | \$397.77        | \$424.63        | \$453.30        | \$483.83        |
| Total Bimonthly Water Bill             |                        | \$400.19        | \$406.00        | \$433.94        | \$463.86        | \$495.85        | \$530.11        |
| \$ Change                              |                        |                 | \$5.81          | \$27.94         | \$29.92         | \$31.99         | \$34.26         |
| % Change                               |                        |                 | 1.5%            | 6.9%            | 6.9%            | 6.9%            | 6.9%            |

**RESIDENTIAL BILL IMPACTS - 3/4" METER**

|  | Bimonthly<br>Use (ccf) | Current<br>Bill | Proposed        |                 |                 |                 |                 |
|--|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  |                        |                 | July 1,<br>2023 | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>Residential: 3/4" meter, 1 ccf</b>  |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge – 3/4"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 3 ccf                      | 1                      | \$5.19          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 2: 4 - 8 ccf                      | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 3: 9 - 16 ccf                     | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 4: Over 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge            | 1                      | \$5.19          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Total Bimonthly Water Bill             |                        | \$27.86         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| \$ Change                              |                        |                 | \$5.49          | \$2.82          | \$3.06          | \$3.32          | \$3.73          |
| % Change                               |                        |                 | 19.7%           | 8.5%            | 8.5%            | 8.5%            | 8.8%            |
| <b>Residential: 3/4" meter, 4 ccf</b>  |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge – 3/4"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 3 ccf                      | 3                      | \$15.57         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 2: 4 - 8 ccf                      | 1                      | \$7.00          | \$6.30          | \$6.76          | \$7.26          | \$7.79          | \$8.36          |
| Tier 3: 9 - 16 ccf                     | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Tier 4: Over 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge            | 4                      | \$22.57         | \$18.89         | \$20.28         | \$21.77         | \$23.37         | \$25.08         |
| Total Bimonthly Water Bill             |                        | \$45.24         | \$52.24         | \$56.45         | \$61.00         | \$65.92         | \$71.36         |
| \$ Change                              |                        |                 | \$7.00          | \$4.21          | \$4.55          | \$4.92          | \$5.44          |
| % Change                               |                        |                 | 15.5%           | 8.1%            | 8.1%            | 8.1%            | 8.3%            |
| <b>Residential: 3/4" meter, 10 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge – 3/4"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 3 ccf                      | 3                      | \$15.57         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 2: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 3: 9 - 16 ccf                     | 2                      | \$17.38         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 4: Over 16 ccf                    | 0                      | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00          |
| Subtotal Consumption Charge            | 10                     | \$67.95         | \$56.68         | \$60.84         | \$65.31         | \$70.10         | \$75.24         |
| Total Bimonthly Water Bill             |                        | \$90.62         | \$90.03         | \$97.01         | \$104.54        | \$112.65        | \$121.52        |
| \$ Change                              |                        |                 | (\$0.59)        | \$6.98          | \$7.53          | \$8.11          | \$8.86          |
| % Change                               |                        |                 | -0.7%           | 7.8%            | 7.8%            | 7.8%            | 7.9%            |

|  | Bimonthly<br>Use (ccf) | Current<br>Bill | Proposed        |                 |                 |                 |                 |
|--|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  |                        |                 | July 1,<br>2023 | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>Residential: 3/4" meter, 20 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge – 3/4"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 3 ccf                      | 3                      | \$15.57         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 2: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 3: 9 - 16 ccf                     | 8                      | \$69.52         | \$50.38         | \$54.08         | \$58.05         | \$62.31         | \$66.88         |
| Tier 4: Over 16 ccf                    | <u>4</u>               | <u>\$44.20</u>  | <u>\$25.19</u>  | <u>\$27.04</u>  | <u>\$29.03</u>  | <u>\$31.16</u>  | <u>\$33.44</u>  |
| Subtotal Consumption Charge            | 20                     | \$164.29        | \$119.66        | \$128.44        | \$137.87        | \$148.00        | \$158.83        |
| Total Bimonthly Water Bill             |                        | \$186.96        | \$153.01        | \$164.61        | \$177.10        | \$190.55        | \$205.11        |
| \$ Change                              |                        |                 | (\$33.95)       | \$11.60         | \$12.50         | \$13.44         | \$14.57         |
| % Change                               |                        |                 | -18.2%          | 7.6%            | 7.6%            | 7.6%            | 7.6%            |
| <b>Residential: 3/4" meter, 40 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge – 3/4"              |                        | \$22.67         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                     |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 3 ccf                      | 3                      | \$15.57         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 2: 4 - 8 ccf                      | 5                      | \$35.00         | \$31.49         | \$33.80         | \$36.28         | \$38.95         | \$41.80         |
| Tier 3: 9 - 16 ccf                     | 8                      | \$69.52         | \$50.38         | \$54.08         | \$58.05         | \$62.31         | \$66.88         |
| Tier 4: Over 16 ccf                    | <u>24</u>              | <u>\$265.20</u> | <u>\$278.19</u> | <u>\$296.37</u> | <u>\$315.78</u> | <u>\$336.46</u> | <u>\$358.43</u> |
| Subtotal Consumption Charge            | 40                     | \$385.29        | \$372.65        | \$397.77        | \$424.63        | \$453.30        | \$483.83        |
| Total Bimonthly Water Bill             |                        | \$407.96        | \$406.00        | \$433.94        | \$463.86        | \$495.85        | \$530.11        |
| \$ Change                              |                        |                 | (\$1.96)        | \$27.94         | \$29.92         | \$31.99         | \$34.26         |
| % Change                               |                        |                 | -0.5%           | 6.9%            | 6.9%            | 6.9%            | 6.9%            |

### COMMERCIAL BILL IMPACTS

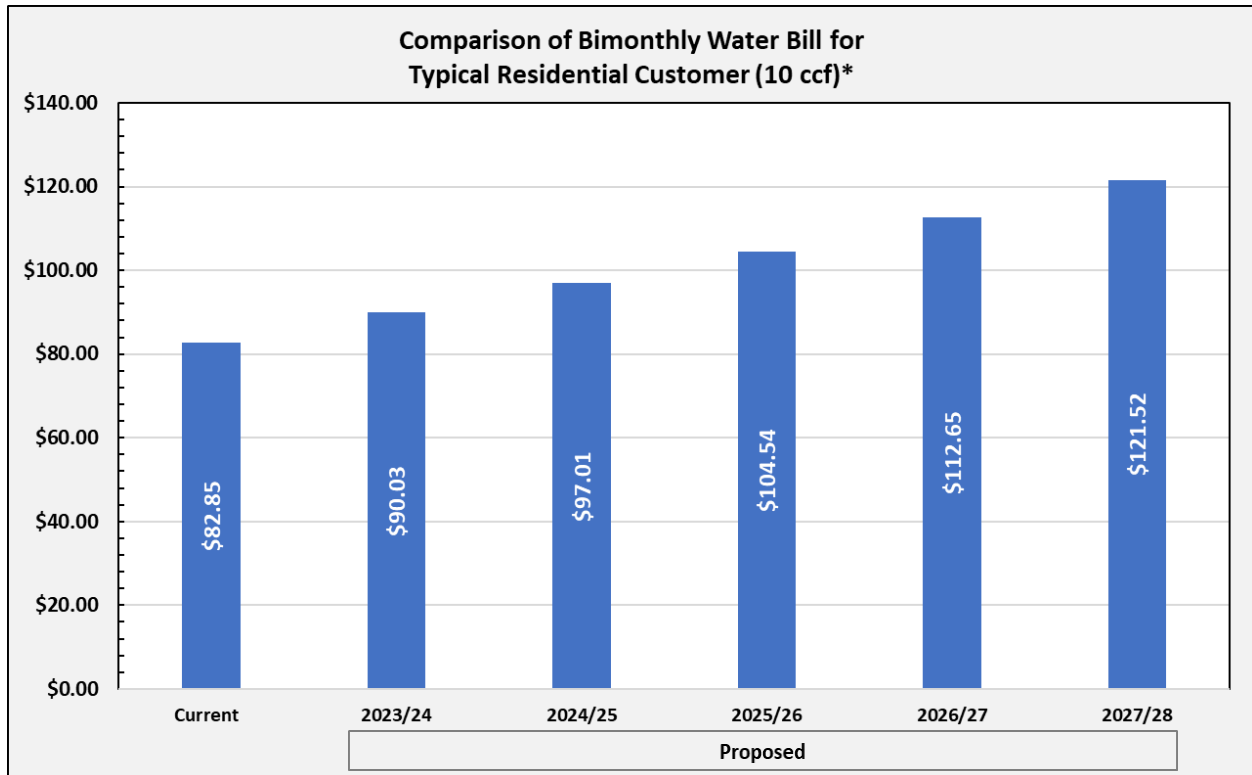
|   | Bimonthly<br>Use (ccf) | Current<br>Bill | Proposed        |                 |                 |                 |                 |
|---|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|   |                        |                 | July 1,<br>2023 | July 1,<br>2024 | July 1,<br>2025 | July 1,<br>2026 | July 1,<br>2027 |
| <b>Commercial: 5/8" meter, 10 ccf</b>   |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 5/8"               |                        | \$35.07         | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                      |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 8 ccf                       | 8                      | \$41.58         | \$44.08         | \$47.32         | \$50.80         | \$54.53         | \$58.52         |
| Tier 2: 9 - 16 ccf                      | 2                      | \$17.38         | \$12.60         | \$13.52         | \$14.51         | \$15.58         | \$16.72         |
| Tier 3: Over 16 ccf                     | <u>0</u>               | <u>\$0.00</u>   | <u>\$0.00</u>   | <u>\$0.00</u>   | <u>\$0.00</u>   | <u>\$0.00</u>   | <u>\$0.00</u>   |
| Subtotal Consumption Charge             | 10                     | \$58.96         | \$56.68         | \$60.84         | \$65.31         | \$70.10         | \$75.24         |
| Total Bimonthly Water Bill              |                        | \$94.03         | \$90.03         | \$97.01         | \$104.54        | \$112.65        | \$121.52        |
| \$ Change                               |                        |                 | (\$4.00)        | \$6.98          | \$7.53          | \$8.11          | \$8.86          |
| % Change                                |                        |                 | -4.3%           | 7.8%            | 7.8%            | 7.8%            | 7.9%            |
| <b>Commercial: 1-1/2" meter, 40 ccf</b> |                        |                 |                 |                 |                 |                 |                 |
| Fixed Meter Charge - 1-1/2"             |                        | \$0.00          | \$33.35         | \$36.17         | \$39.23         | \$42.55         | \$46.28         |
| Consumption Charge                      |                        |                 |                 |                 |                 |                 |                 |
| Tier 1: 0 - 8 ccf                       | 8                      | \$56.00         | \$44.08         | \$47.32         | \$50.80         | \$54.53         | \$58.52         |
| Tier 2: 9 - 16 ccf                      | 8                      | \$69.52         | \$50.38         | \$54.08         | \$58.05         | \$62.31         | \$66.88         |
| Tier 3: Over 16 ccf                     | <u>24</u>              | <u>\$265.20</u> | <u>\$278.19</u> | <u>\$296.37</u> | <u>\$315.78</u> | <u>\$336.46</u> | <u>\$358.43</u> |
| Subtotal Consumption Charge             | 40                     | \$390.72        | \$372.65        | \$397.77        | \$424.63        | \$453.30        | \$483.83        |
| Total Bimonthly Water Bill              |                        | \$390.72        | \$406.00        | \$433.94        | \$463.86        | \$495.85        | \$530.11        |
| \$ Change                               |                        |                 | \$15.28         | \$27.94         | \$29.92         | \$31.99         | \$34.26         |
| % Change                                |                        |                 | 3.9%            | 6.9%            | 6.9%            | 6.9%            | 6.9%            |

**IRRIGATION BILL IMPACTS**

|   | Bimonthly<br>Use (ccf) | Current<br>Bill   | Proposed          |                   |                   |                   |                   |
|---|------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   |                        |                   | July 1,<br>2023   | July 1,<br>2024   | July 1,<br>2025   | July 1,<br>2026   | July 1,<br>2027   |
| <b>Irrigation: 1-1/2" meter, 50 ccf</b> |                        |                   |                   |                   |                   |                   |                   |
| Fixed Meter Charge - 5/8"               |                        | \$92.47           | \$88.95           | \$96.49           | \$104.62          | \$113.49          | \$123.24          |
| Consumption Charge                      |                        |                   |                   |                   |                   |                   |                   |
| Tier 1: 0 - 8 ccf                       | 8                      | \$41.42           | \$44.08           | \$47.32           | \$50.80           | \$54.53           | \$58.52           |
| Tier 2: 9 - 16 ccf                      | 8                      | \$90.80           | \$50.38           | \$54.08           | \$58.05           | \$62.31           | \$66.88           |
| Tier 3: Over 16 ccf                     | <u>34</u>              | <u>\$448.46</u>   | <u>\$455.29</u>   | <u>\$484.91</u>   | <u>\$516.51</u>   | <u>\$550.17</u>   | <u>\$585.93</u>   |
| Subtotal Consumption Charge             | 50                     | \$580.68          | \$549.75          | \$586.31          | \$625.36          | \$667.01          | \$711.32          |
| Total Bimonthly Water Bill              |                        | \$673.15          | \$638.70          | \$682.80          | \$729.98          | \$780.49          | \$834.56          |
| \$ Change                               |                        |                   | (\$34.46)         | \$44.10           | \$47.18           | \$50.51           | \$54.07           |
| % Change                                |                        |                   | -5.1%             | 6.9%              | 6.9%              | 6.9%              | 6.9%              |
| <b>Irrigation: 2" meter, 100 ccf</b>    |                        |                   |                   |                   |                   |                   |                   |
| Fixed Meter Charge - 2"                 |                        | \$92.47           | \$88.95           | \$96.49           | \$104.62          | \$113.49          | \$123.24          |
| Consumption Charge                      |                        |                   |                   |                   |                   |                   |                   |
| Tier 1: 0 - 8 ccf                       | 8                      | \$41.42           | \$44.08           | \$47.32           | \$50.80           | \$54.53           | \$58.52           |
| Tier 2: 9 - 16 ccf                      | 8                      | \$90.80           | \$50.38           | \$54.08           | \$58.05           | \$62.31           | \$66.88           |
| Tier 3: Over 16 ccf                     | <u>84</u>              | <u>\$1,107.96</u> | <u>\$1,087.78</u> | <u>\$1,158.24</u> | <u>\$1,233.40</u> | <u>\$1,313.42</u> | <u>\$1,398.42</u> |
| Subtotal Consumption Charge             | 100                    | \$1,240.18        | \$1,182.24        | \$1,259.64        | \$1,342.25        | \$1,430.26        | \$1,523.81        |
| Total Bimonthly Water Bill              |                        | \$1,332.65        | \$1,271.19        | \$1,356.13        | \$1,446.87        | \$1,543.75        | \$1,647.05        |
| \$ Change                               |                        |                   | (\$61.46)         | \$84.94           | \$90.74           | \$96.88           | \$103.30          |
| % Change                                |                        |                   | -4.6%             | 6.7%              | 6.7%              | 6.7%              | 6.7%              |

Figure 5 below demonstrates the typical bimonthly water bill a residential customer with a 5/8" or 3/4" meter will be charged during each year of the five-year Proposition 218 period.

**Figure 5: Comparison of Bimonthly Water Bill for Typical Residential Customer  
City of Brisbane  
Water Utility Rate Study 2022**



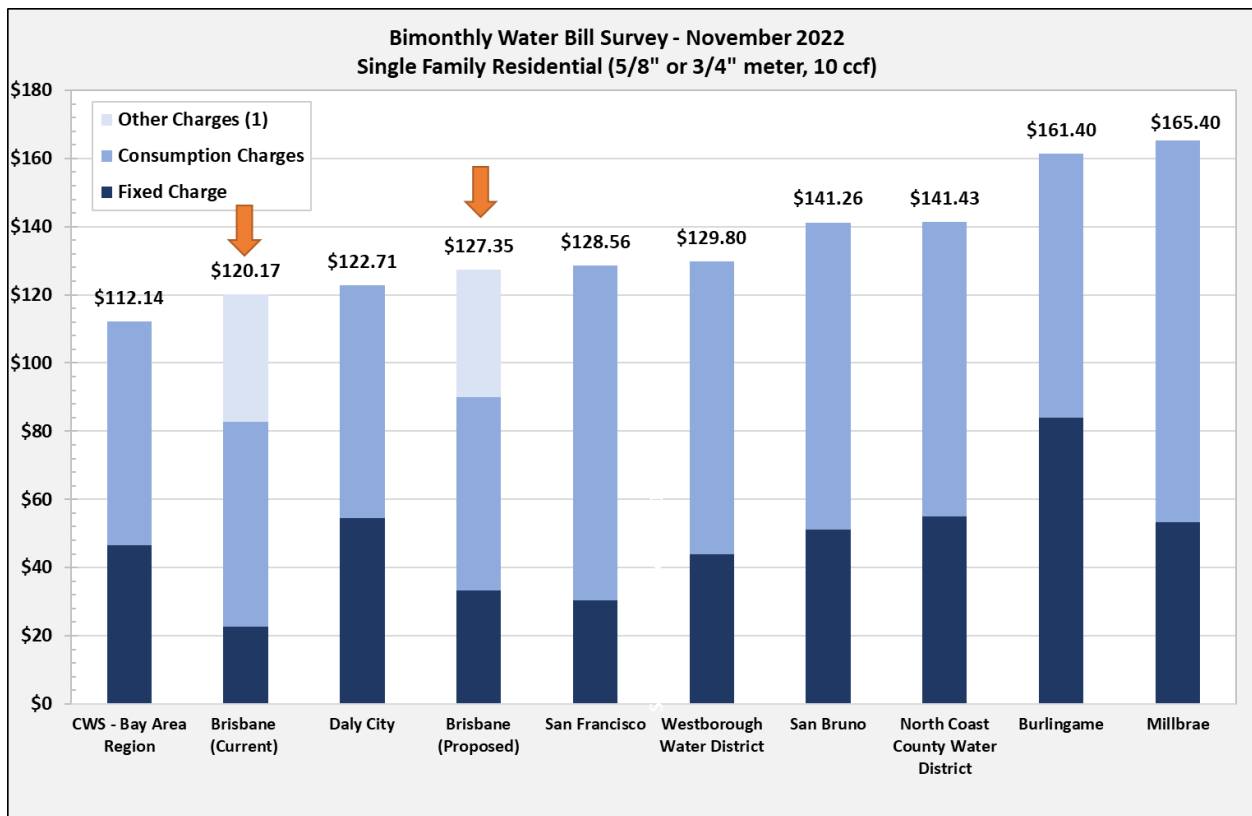
\* Does not include Drought Surcharge or Capital Charge



### 2.6.7 Regional Water Bill Survey

The bar graph in Figure 6 below compares the City’s current typical bimonthly residential water bill based on a 5/8” or 3/4” meter using 10 ccf over a 2-month period with the proposed 2023/24 bill. The bill estimates also include the Drought Contingency Charge (\$2.32) and half of the Capital Projects Charge that is evenly split with the Sewer Bill ( $\$70/2 = \$35$ ). The City’s bill is compared with those of other local agencies.

**Figure 6: Bimonthly Water Bill Survey  
City of Brisbane  
Water Utility Rate Study 2022**



## 2.7 Water Low Income Discount

To comply with Proposition 218's cost of service requirements, water rate revenues from one group of customers cannot be used to subsidize the rates of another group. Instead, the City could utilize non-rate revenues, such as General Fund revenues, interest earnings, or delinquent penalties to fund a low income discount program. Moreover, to eliminate the administrative burden of the City developing its own low-income criteria, it is recommended that the City provide assistance to low income residents who meet the criteria of other local assistance programs such as PG&E's CARE program.

The low income discount program should be reviewed annually by the City to determine whether the water fund has adequate non-rate revenues to fund the program. Because non-water rate revenues will be used to pay for the discount, the amount of the low income discount is based on the discretion of the City.

Table 29 calculates a sample low income discount for water that is funded from a General Fund transfer. This transfer is estimated at \$37,500 for the current year. The City estimates that approximately 400 customers or about 24.0% of all accounts could qualify for a discount based on the PG&E's CARE program requirements. Based on 400 customers, the table shows a bimonthly discount of approximately \$15.60 per customer. For an average residential customer (10 ccf bimonthly use), this equates to a 17.3% discount off the proposed bimonthly bill for July 1, 2023.

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**Table 29: Water Low Income Discount**  
**City of Brisbane**  
**Water Utility Rate Study 2022**

|   |              |
|---|--------------|
| Total Number of Residential Water Customers                                   | 1,650        |
| Estimated Number of Customers Eligible for Discount                           | 400          |
| Total Est. Water Low Income Discount Revenue                                  | \$37,500     |
| Annual Discount per Customer  | \$93.80      |
| Bimonthly Discount per Customer   | \$15.60      |
| Proposed Average Bimonthly Water Bill (10 ccf) for July 1, 2023               | \$90.03      |
| Proposed Average Bimonthly Water Bill (10 ccf) with Discount for July 1, 2023 | \$74.43      |
| <i>% of Discount</i>  | <i>17.3%</i> |

## SECTION 3: SEWER RATE STUDY

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The City of Brisbane provides sewer service to approximately 1,900 residents, several commercial areas, and some light industrial development. On average, the City's sewage effluent totals approximately 173,000 ccf each year. The last sewer rate study was conducted in 2001, and sewer rates for operations have not increased since 2012. Based on City billing records, the current average monthly residential sewer flow is 5 ccf per month, or a total of 10 ccf per bimonthly billing period. The average sewer bill is currently \$106.67 per bimonthly billing period (not including Capital Project Charges).

### 3.1 Current Wastewater Rates

A schedule of current bimonthly wastewater rates is provided in Table 30. The City's current rate structure includes two components: (a) a Fixed Charge and (b) a Variable Rate.

#### 3.1.1 Fixed Charge

All customers are charged the same Fixed Charge. The Fixed Charge is the minimum charge for all customers. Even when a customer does not use the sewer system, the City incurs fixed costs associated with maintaining the ability or readiness to serve each connection.

The Fixed Charges are intended to recover the City's fixed expenses and currently generate about 40.0% of total wastewater rate revenues. Fixed costs include staffing, customer service, debt service, system maintenance, and repairs.

#### 3.1.2 Variable Rate

In addition to the Fixed Charge, customers pay a Variable Rate per ccf based on a two-tiered rate structure that varies based on customer class. For residential customers, sewer flow is approximated using winter consumption for the four-month period between October and January. Commercial accounts are billed according to three customer strength categories.

The Variable Rate is intended to recover costs that vary based on the amount of sewer flow and currently generate roughly 60.0% of total wastewater rate revenues. Variable expenses include treatment costs from the City of San Francisco, utilities, and chemicals.

#### 3.1.3 Capital Project Charge

In April of 2014, the City Council approved the first Capital Project Charge to pay for infrastructure projects for the water and sewer systems. The projects are based on the City's Capital Improvement Plan which outlines the need for approximately \$5 million in projects every five years. The policy adopted in 2014 included placing a new Capital Project Charge on the water and sewer bill four times over a twenty-year period. The second charge should have been implemented in 2020 but was delayed due to the impacts of COVID. To prevent further delays in completing the projects, the City Council adopted the second of four increases to the Capital Project Charge in October 2022.

The Capital Project Charge is levied according to a tiered rate system based on springtime usage (mid-February through mid-June) to ensure that lower water users pay less than higher users. Total Capital Project Charge revenue is evenly split between the water and sewer funds. The Capital Project Charge will not be reviewed or analyzed in this study.

**Table 30: Current Bi-Monthly Sewer Rates (Effective 10/15/12)**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

| <b>RESIDENTIAL</b>    | <b>Bimonthly Charge</b> |
|-----------------------|-------------------------|
| Flat Charge           | \$68.87                 |
| Variable Charge [1]   |                         |
| Tier 1: 0 - 8 ccf     | \$2.81                  |
| Tier 2: Over 8 ccf    | \$7.66                  |
| <b>COMMERCIAL [2]</b> | <b>Bimonthly Charge</b> |
| <b>Standard</b>       |                         |
| Flat Charge           | \$68.87                 |
| Variable Charge       |                         |
| Tier 1: 0 - 8 ccf     | \$3.84                  |
| Tier 2: Over 8 ccf    | \$7.66                  |
| <b>Medium</b>         |                         |
| Flat Charge           | \$68.87                 |
| Variable Charge       |                         |
| Tier 1: 0 - 8 ccf     | \$5.68                  |
| Tier 2: Over 8 ccf    | \$9.74                  |
| <b>Heavy</b>          |                         |
| Flat Charge           | \$68.87                 |
| Variable Charge       |                         |
| Tier 1: 0 - 8 ccf     | \$7.59                  |
| Tier 2: Over 8 ccf    | \$11.82                 |

1 - Residential bill is based on winter consumption (Oct, Nov, Dec & Jan)

2 - Standard: offices, retail establishments without restaurant, warehouses, churches, and schools

    Medium: automotive services, retail establishments or offices with restaurant, laundromats, and markets

    Heavy: restaurants, food preparation establishments, printing shops, metal fabrication shops, and laboratories.

## 3.2 Wastewater System Overview

### 3.2.1 Wastewater System

Wastewater is collected and conveyed by the sewer gravity system, force mains, and four City-owned lift stations: Hitachi Lift Station, Harbor Lift Station, Sierra Point Lift Station, and Valley Drive Lift Station.

The sewer collection system consists of more than 80,000 feet of laterals, mains, trunks, and 20,000 feet of forcemains ranging in size from 6 to 24 inches in diameter. The majority of the wastewater collected within the City’s service area flows by gravity or is pumped by privately owned lift stations to one of the City’s lift stations. From the Valley Drive Lift Station, all wastewater in the City and GVMID service areas is then pumped to the Southeast Water Pollution Control Plant in San Francisco via the Candlestick Interceptor Trunk Line.

### 3.2.2 Sewer Customers and Flow

Table 31 includes the current number of accounts and flow by customer strength. Residential customers represent about 87.0% of total accounts and roughly 52.0% of total flow.

**Table 31: Current Sewer Accounts & Flow by Customer Class  
City of Brisbane  
Sewer Utility Rate Study 2022**

|                            | Current       | % of Total   |
|----------------------------|---------------|--------------|
| <b>NO. OF ACCOUNTS (1)</b> |               |              |
| Residential                | 1,669         | 87.0%        |
| Standard Commercial        | 215           | 11.2%        |
| Medium Commercial          | 8             | 0.4%         |
| <u>Heavy Commercial</u>    | <u>26</u>     | <u>1.4%</u>  |
| Total                      | 1,918         | 100.0%       |
| <b>SEWER FLOW</b>          |               |              |
| Residential                | 89,719        | 51.9%        |
| Standard Commercial        | 37,290        | 21.6%        |
| Medium Commercial          | 4,261         | 2.5%         |
| <u>Heavy Commercial</u>    | <u>41,651</u> | <u>24.1%</u> |
| Total                      | 172,921       | 100.0%       |

1 - Based on 2021 billing data

## 3.3 Wastewater Financial Plan

### 3.3.1 Sewer Reserves

For accounting purposes, the City’s Utility Fund (Fund 540) combines water and sewer finances into one fund. As of July 1, 2020, the total fund balance for the Utility Fund (Fund 540) in “Cash and investments” was approximately \$7.7 million. However, for the purposes of this study, the total reserves have been allocated between the water and sewer funds as shown on Table 32. Because the Sewer Utility has been operating in a deficit, additional reserves have been assigned to sewer to mitigate rate increases.

**Table 32: Utility Fund (Fund 540) Reserves  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Fund                                       | Beginning Balance as of June 30, 2021 |
|--|---------------------------------------|
| Total Utility Fund (Fund 540) Reserves (1) | \$7,656,890                           |
| Water Utility Reserves (2)                 | \$2,828,445                           |
| Sewer Utility Reserves (2)                 | \$4,828,445                           |

1) Cash and investments (Unaudited Financials).

Source: Proprietary Funds, Statement of Net Position, June 30, 2020

2) Includes GVMID

Adequate fund reserves protect the City when faced with unforeseen financial challenges such as emergency expenses or revenue deficits. Fund reserves allow the City to maintain its financial health and positive credit ratings, especially during emergencies. Moreover, funding can be drawn from reserves to supplement rate revenues lost during drought conditions or other unexpected situations. It is acceptable if reserves dip below the target on a temporary basis, provided the City takes action to attain the target over the longer run.

The City currently has the following sewer reserve fund target:

- *Operating Reserve:* The fund balance target is equal to 25% of annual operating expenses per City policy. This is in line with industry standards that recommend an operating reserve target of at least 25% of annual expenses to account for the time (at least 4 months) that it would take an agency to approve new rate increases to comply with Proposition 218.

### 3.3.2 Sewer Revenues

Table 33 shows a history of revenues for the City’s Utility Fund (Fund 540). The “Water Sales” revenues are evenly split between City Water and GVMID Water. “Sewer Service Charges” are evenly split between City Sewer and GVMID Sewer. The “GVMID Only” tax revenues are divided evenly by the three GVMID utilities (GVMID water, sewer, and storm drain) to ensure that storm drain revenues are not included in this study. All Other Revenues including “Investment Earnings,” “Low Income Rate Assistance,” and “Capital Charge” are divided evenly amongst the four utilities.

**Table 33: Utility Fund (Fund 540) Budgeted Revenues**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

| REVENUE CATEGORY                         | Actual<br>2018/19  | Budgeted           |                    |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  |                    | 2019/20            | 2020/21            | 2021/22            |
| <b>WATER ONLY (1)</b>                    |                    |                    |                    |                    |
| 40801 Water Sales                        | \$3,050,110        | \$2,950,000        | \$2,750,000        | \$3,000,000        |
| 40804 Meter Connection Fees              | \$68,663           | \$20,000           | \$20,000           | \$20,000           |
| 40805 Fire Service Charges               | \$118,952          | \$115,000          | \$115,000          | \$115,000          |
| 40806 Altamar Meter Reading Fee          | \$7,656            | \$7,500            | \$7,500            | \$7,500            |
| <u>Drought Reserve Charge</u>            | <u>\$95,481</u>    | <u>\$120,000</u>   | <u>\$100,000</u>   | <u>\$100,000</u>   |
| <b>Total Water Only</b>                  | <b>\$3,340,862</b> | <b>\$3,212,500</b> | <b>\$2,992,500</b> | <b>\$3,242,500</b> |
| <b>SEWER ONLY (2)</b>                    |                    |                    |                    |                    |
| 40820 Sewer Service Charges              | \$2,188,866        | \$2,200,000        | \$2,000,000        | \$2,000,000        |
| 40821 <u>Sewer Connection Fees</u>       | <u>\$123,706</u>   | <u>\$3,000</u>     | <u>\$3,000</u>     | <u>\$3,000</u>     |
| <b>Total Sewer Only</b>                  | <b>\$2,312,572</b> | <b>\$2,203,000</b> | <b>\$2,003,000</b> | <b>\$2,003,000</b> |
| <b>GVMID ONLY (3)</b>                    |                    |                    |                    |                    |
| 40101 Current Secured Tax                | \$27,358           | \$29,000           | \$29,000           | \$29,000           |
| 40102 Current Unsecured Tax              | \$1,513            | \$1,500            | \$1,500            | \$1,500            |
| 40103 Prior Year Tax                     | (\$1)              | \$0                | \$0                | \$0                |
| 40105 Supplemental Property Taxes        | \$1,048            | \$0                | \$0                | \$0                |
| 40108 Property Tax from RDA              | \$2,866            | \$100              | \$100              | \$100              |
| 40150 <u>ERAF</u>                        | <u>\$134</u>       | <u>\$100</u>       | <u>\$100</u>       | <u>\$100</u>       |
| <b>Total GVMID</b>                       | <b>\$32,918</b>    | <b>\$30,700</b>    | <b>\$30,700</b>    | <b>\$30,700</b>    |
| <b>ALL OTHER REVENUES (4)</b>            |                    |                    |                    |                    |
| 40501 Investment Earnings                | \$133,599          | \$50,000           | \$50,000           | \$50,000           |
| 40503 Unrealized-Gain/Loss               | \$96,152           | \$0                | \$0                | \$0                |
| 40609 H.O.P.T.R                          | \$121              | \$100              | \$100              | \$100              |
| 40770 Processing Fee                     | \$5,472            | \$0                | \$0                | \$0                |
| 40802 Account Open/Reconnections         | \$2,987            | \$3,000            | \$3,000            | \$3,000            |
| 40803 Late Payment Charges               | \$8,117            | \$10,000           | \$10,000           | \$10,000           |
| 40810 Less: Low Income Rate Assistance   | (\$42,336)         | (\$50,000)         | (\$75,000)         | (\$75,000)         |
| 40825 Capital Charge                     | \$378,443          | \$365,000          | \$365,000          | \$365,000          |
| 40941 Returned Check Fees                | \$75               | \$0                | \$0                | \$0                |
| 40959 Reimbursed Expenses - Current Year | \$3,541            | \$0                | \$0                | \$0                |
| 40961 <u>Transfers from Other Funds</u>  | <u>\$43,000</u>    | <u>\$50,000</u>    | <u>\$75,000</u>    | <u>\$75,000</u>    |
| <b>Total All Other Revenues</b>          | <b>\$629,172</b>   | <b>\$428,100</b>   | <b>\$428,100</b>   | <b>\$428,100</b>   |
| <b>TOTAL REVENUES</b>                    | <b>\$6,315,524</b> | <b>\$5,874,300</b> | <b>\$5,454,300</b> | <b>\$5,704,300</b> |

Source: Budget 2020\_2022

- 1 - Divided by 2 between City Water & GVMID Water
- 2 - Divided by 2 between City Sewer & GVMID Sewer
- 3 - Divided by 3 between GVMID Water, Sewer, & Stormwater
- 4 - Divided by 4 between City Water, City Sewer, GVMID Water, & GVMID Sewer

Table 34 summarizes total revenues for the Sewer Utility. For 2022/23, Sewer Service Revenues are estimated at \$2 million with total sewer revenues projected at \$2.2 million.

**Table 34: Sewer Utility Revenues**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|                        | Actual<br>2018/19 | Budget           |                  |                  |
|------------------------|-------------------|------------------|------------------|------------------|
|                        |                   | 2019/20          | 2020/21          | 2021/22          |
| <b>SEWER REVENUES</b>  |                   |                  |                  |                  |
| Sewer Service Revenues | \$2,188,866       | \$2,200,000      | \$2,000,000      | \$2,000,000      |
| Sewer Connection Fees  | \$123,706         | \$3,000          | \$3,000          | \$3,000          |
| All Other Revenues (1) | <u>\$314,586</u>  | <u>\$214,050</u> | <u>\$214,050</u> | <u>\$214,050</u> |
| Total                  | \$2,627,158       | \$2,417,050      | \$2,217,050      | \$2,217,050      |
| <i>Percent Change</i>  |                   | -8.0%            | -8.3%            | 0.0%             |

1 – All other revenues divided by 2 (Table 33)



### 3.3.3 Sewer Expenses

Table 35 summarizes the operating expenses for the Sewer Utility (Fund 6130) based on the budget. On average, operating expenses have increased by 9.1% over the past 4 years. The most significant increase was for “Service and Supplies” which includes treatment costs from the City of San Francisco.

**Table 35: Sewer Utility (Fund 6130) Operating Expenses  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Expense                                    | Actual<br>2018/19  | Budgeted           |                    |                    | Avg Annual<br>Increase |
|--|--------------------|--------------------|--------------------|--------------------|------------------------|
|  |                    | 2019/20            | 2020/21            | 2021/22            |                        |
| Salaries                                   | \$267,242          | \$233,759          | \$322,891          | \$335,165          |                        |
| <i>Percent Change</i>                      | 1.9%               | -12.5%             | 38.1%              | 3.8%               | 5.0%                   |
| Payroll Taxes                              | \$4,062            | \$3,357            | \$4,421            | \$4,599            |                        |
| <i>Percent Change</i>                      | 3.6%               | -17.4%             | 31.7%              | 4.0%               | 3.2%                   |
| Benefits                                   | \$122,495          | \$143,745          | \$158,152          | \$184,923          |                        |
| <i>Percent Change</i>                      | 1.9%               | 17.3%              | 10.0%              | 16.9%              | 9.0%                   |
| Insurance                                  | \$24,716           | \$24,664           | \$37,974           | \$38,113           |                        |
| <i>Percent Change</i>                      | 22.5%              | -0.2%              | 54.0%              | 0.4%               | 13.6%                  |
| Supplies and Services                      | \$1,125,704        | \$1,128,565        | \$1,230,164        | \$1,487,945        |                        |
| <i>Percent Change</i>                      | 32.0%              | 0.3%               | 9.0%               | 21.0%              | 11.8%                  |
| Admin Charges and Credits                  | \$258,621          | \$289,277          | \$331,504          | \$337,027          |                        |
| <i>Percent Change</i>                      | 3.2%               | 11.9%              | 14.6%              | 1.7%               | 6.1%                   |
| <b>TOTAL CITY SEWER OPERATING EXPENSES</b> | <b>\$1,887,323</b> | <b>\$1,927,367</b> | <b>\$2,170,105</b> | <b>\$2,472,772</b> |                        |
| <i>Percent Change</i>                      | 18.1%              | 2.1%               | 12.6%              | 13.9%              | 9.1%                   |

Source: Budget 2020\_2022

Table 36 summarizes the operating expenses for GVMID Utility (Fund 6120). On average, operating expenses have increased by 7.0% over the past 4 years. Each expense category is divided by 3 to determine how much should be allocated to the Water Utility, Sewer Utility, and GVMID storm water. GVMID storm water expenses are not included in this study.

**Table 36: GVMID Combined Utility (Fund 6120) Operating Expenses  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Expense (1)                                   | Actual<br>2018/19  | Budgeted           |                    |                    | Avg Annual<br>Increase | 2021/22 Budget<br>per Utility (2) |
|---|--------------------|--------------------|--------------------|--------------------|------------------------|-----------------------------------|
|   |                    | 2019/20            | 2020/21            | 2021/22            |                        |                                   |
| Salaries                                      | \$180,809          | \$179,236          | \$333,150          | \$345,879          |                        | \$115,293                         |
| <i>Percent Change</i>                         | -5.3%              | -0.9%              | 85.9%              | 3.8%               | 17.6%                  |                                   |
| Payroll Taxes                                 | \$3,987            | \$2,306            | \$4,584            | \$4,769            |                        | \$1,590                           |
| <i>Percent Change</i>                         | 39.2%              | -42.2%             | 98.8%              | 4.0%               | 4.6%                   |                                   |
| Benefits                                      | \$98,172           | \$95,450           | \$153,452          | \$181,974          |                        | \$60,658                          |
| <i>Percent Change</i>                         | 0.8%               | -2.8%              | 60.8%              | 18.6%              | 16.7%                  |                                   |
| Insurance                                     | \$15,567           | \$16,406           | \$39,376           | \$39,521           |                        | \$13,174                          |
| <i>Percent Change</i>                         | -7.8%              | 5.4%               | 140.0%             | 0.4%               | 26.2%                  |                                   |
| Supplies and Services                         | \$1,105,804        | \$1,166,543        | \$1,165,054        | \$1,291,240        |                        | \$430,413                         |
| <i>Percent Change</i>                         | 41.8%              | 5.5%               | -0.1%              | 10.8%              | 4.0%                   |                                   |
| Admin Charges and Credits                     | \$303,900          | \$335,321          | \$341,554          | \$380,262          |                        | \$126,754                         |
| <i>Percent Change</i>                         | -2.0%              | 10.3%              | 1.9%               | 11.3%              | 5.8%                   |                                   |
| <b>TOTAL GVMID UTILITY OPERATING EXPENSES</b> | <b>\$1,708,239</b> | <b>\$1,795,263</b> | <b>\$2,037,171</b> | <b>\$2,243,645</b> |                        | <b>\$747,882</b>                  |
| <i>Percent Change</i>                         | 22.2%              | 5.1%               | 13.5%              | 10.1%              | 7.1%                   |                                   |

Source: Budget 2020\_2022

1 - Does not include expenses to "Operate a Storm Drain System" or Depreciation

2 - Budget divided by the 3 GVMID utilities (water, sewer, & storm water)

Table 37 combines the Sewer Utility (Fund 6130) Operating Expenses from Table 35 with the GVMID Combined Utility (Fund 6120) Operating Expenses from Table 36 to determine total Sewer Utility expenses for the past 4 years.

**Table 37: Sewer Utility Combined Operating Expenses  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Expense (1)                           | Actual<br>2018/19  | Budget             |                    |                    |
|---------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                                       |                    | 2019/20            | 2020/21            | 2021/22            |
| Salaries                              | \$327,511          | \$293,505          | \$433,940          | \$450,458          |
| Payroll Taxes                         | \$5,391            | \$4,125            | \$5,949            | \$6,188            |
| Benefits                              | \$155,219          | \$175,562          | \$209,302          | \$245,581          |
| Insurance                             | \$29,905           | \$30,133           | \$51,099           | \$51,287           |
| Supplies and Services                 | \$1,494,306        | \$1,517,413        | \$1,618,515        | \$1,918,359        |
| Admin Charges and Credits             | <u>\$359,921</u>   | <u>\$401,051</u>   | <u>\$445,356</u>   | <u>\$463,781</u>   |
| <b>TOTAL SEWER OPERATING EXPENSES</b> | <b>\$2,372,253</b> | <b>\$2,421,788</b> | <b>\$2,764,162</b> | <b>\$3,135,654</b> |
| <i>Percent Change</i>                 | <i>20.1%</i>       | <i>2.1%</i>        | <i>14.1%</i>       | <i>13.4%</i>       |

Source: Budget 2020\_2022

1 - Does not include Depreciation

Table 38 below provides a projection of estimated costs for the next 5 years through 2027/28. Escalation factors were determined using City input. Supplies and Services which includes treatment costs is projected to increase by 10.0% each year. Salaries and Benefits are projected to increase by 4.0% each year. Insurance is increased by 5.0% per year, and Admin Charges and Credits are escalated by 3.0% each year. Overall, based on the escalation factors shown, total sewer operating expenses are projected to increase by approximately 8.0% each year.

**Table 38: Sewer Utility Projection of Future Operating Expenses**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

| Expense (1)                           | Budget<br>2021/22  | Escalation<br>Factor | Projected<br>2022/23 | Years 1 -5: Proposition 218 |                    |                    |                    |                    |
|---------------------------------------|--------------------|----------------------|----------------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|
|                                       |                    |                      |                      | 2023/24                     | 2024/25            | 2025/26            | 2026/27            | 2027/28            |
| Salaries                              | \$450,458          | 4.0%                 | \$468,000            | \$487,000                   | \$506,000          | \$526,000          | \$547,000          | \$569,000          |
| Payroll Taxes                         | \$6,188            | 4.0%                 | \$6,000              | \$6,000                     | \$6,000            | \$6,000            | \$6,000            | \$6,000            |
| Benefits                              | \$245,581          | 4.0%                 | \$255,000            | \$265,000                   | \$276,000          | \$287,000          | \$298,000          | \$310,000          |
| Insurance (2)                         | \$51,287           | 5.0%                 | \$56,000             | \$59,000                    | \$62,000           | \$65,000           | \$68,000           | \$71,000           |
| Supplies and Services                 | \$1,918,359        | 10.0%                | \$2,115,000          | \$2,327,000                 | \$2,560,000        | \$2,816,000        | \$3,098,000        | \$3,408,000        |
| Admin Charges and Credits             | <u>\$463,781</u>   | 4.0%                 | <u>\$482,000</u>     | <u>\$501,000</u>            | <u>\$521,000</u>   | <u>\$542,000</u>   | <u>\$564,000</u>   | <u>\$587,000</u>   |
| <b>TOTAL SEWER OPERATING EXPENSES</b> | <b>\$3,135,654</b> |                      | <b>\$3,382,000</b>   | <b>\$3,645,000</b>          | <b>\$3,931,000</b> | <b>\$4,242,000</b> | <b>\$4,581,000</b> | <b>\$4,951,000</b> |
| Percent Change                        | 13.4%              |                      | 7.9%                 | 7.8%                        | 7.8%               | 7.9%               | 8.0%               | 8.1%               |

Source: Budget 2020\_2022

1 - Does not include Depreciation

2 - Insurance anticipated to increase by 10% in 2023/23

### 3.3.4 Sewer Treatment Costs

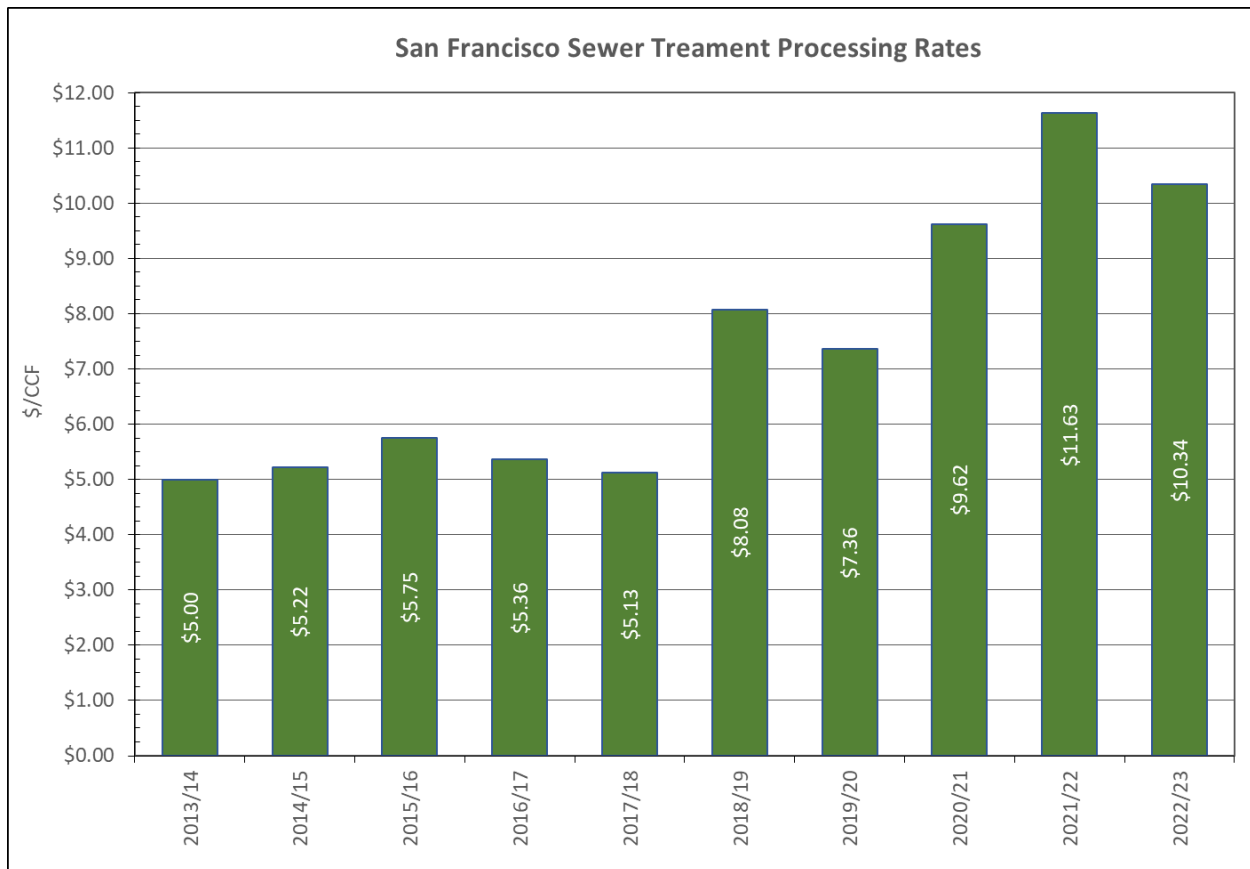
As shown on Table 39, sewer treatment costs are the largest expense for the Sewer Utility, accounting for 54.1% of total operating expenses in 2022/23.

**Table 39: Sewer Treatment Processing Costs**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|   | Budget      |             |             |             | Projected<br>2022/23 |
|---|-------------|-------------|-------------|-------------|----------------------|
|   | 2018/19     | 2019/20     | 2020/21     | 2021/22     |                      |
| Treatment Rate per ccf  | \$8.08      | \$7.36      | \$9.62      | \$11.63     | \$10.34              |
| Estimated Total Sewer Flow                                    | 172,000     | 172,000     | 173,000     | 173,000     | 177,000              |
| Total Treatment Costs   | \$1,389,760 | \$1,265,920 | \$1,664,260 | \$2,011,990 | \$1,830,180          |
| Total Sewer Operating Expenses                                | \$2,372,253 | \$2,421,788 | \$2,764,162 | \$3,135,654 | \$3,382,000          |
| % of Total Treatment Costs/<br>Total Sewer Operating Expenses | 58.6%       | 52.3%       | 60.2%       | 64.2%       | 54.1%                |

Figure 7 shows a history of treatment processing rates set by San Francisco. Since 2013/14, the cost for treatment has more than doubled from \$5.00 per ccf to \$10.34 per ccf for 2022/23. Meanwhile, the City has not increased its operational sewer rates since 2012. To be conservative, this study estimates that rates will increase by 10.0% each year during the rate study period.

**Figure 7: Historical San Francisco Treatment Processing Rates  
City of Brisbane  
Sewer Utility Rate Study 2022**



### 3.3.5 Sewer Net Revenues

Table 40 shows a history of the Sewer Utility's net revenues. The Sewer Utility has been operating in a deficit in which expenses exceed revenues. The 2021/22 budget is projecting a deficit of approximately \$1.2 million which means that the Sewer Fund will need to rely on reserves to cover expenses and will not meet debt coverage.

**Table 40: Sewer Net Revenues  
City of Brisbane  
Sewer Utility Rate Study 2022**

|                           | Actual<br>2018/19 | Budget             |                    |                      |
|---------------------------|-------------------|--------------------|--------------------|----------------------|
|                           |                   | 2019/20            | 2020/21            | 2021/22              |
| <b>SEWER REVENUES</b>     |                   |                    |                    |                      |
| Sewer Service Revenues    | \$2,188,866       | \$2,200,000        | \$2,000,000        | \$2,000,000          |
| <u>Other Revenues</u>     | <u>\$438,292</u>  | <u>\$217,050</u>   | <u>\$217,050</u>   | <u>\$217,000</u>     |
| Total                     | \$2,627,158       | \$2,417,050        | \$2,217,050        | \$2,217,000          |
| <b>SEWER EXPENSES</b>     |                   |                    |                    |                      |
| Operating                 | \$2,372,253       | \$2,421,788        | \$2,764,162        | \$3,135,654          |
| <u>Debt Service</u>       | <u>\$312,156</u>  | <u>\$313,906</u>   | <u>\$315,156</u>   | <u>\$318,344</u>     |
| Subtotal                  | \$2,684,409       | \$2,735,695        | \$3,079,318        | \$3,453,998          |
| <b>TOTAL NET REVENUES</b> | <b>(\$57,251)</b> | <b>(\$318,645)</b> | <b>(\$862,268)</b> | <b>(\$1,236,998)</b> |

### 3.3.6 Debt Service

The Sewer Utility currently has one outstanding debt obligation that is shared with the Water Utility – the 2015 Utility Revenue Bonds for \$8.3 million. Total debt service for 2022/23 is \$632,063. Debt service payments are split evenly between the Water Utility and Sewer Utility, see Table 41.

**Table 41: 2015 Utility Revenue Bonds - Debt Service Schedule**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

| Fiscal Year<br>Ending June 30 | Principal   | Interest    | Total Debt Service (1) |
|-------------------------------|-------------|-------------|------------------------|
| 2016                          | \$170,000   | \$247,103   | \$417,103              |
| 2017                          | \$305,000   | \$327,763   | \$632,763              |
| 2018                          | \$310,000   | \$318,513   | \$628,513              |
| 2019                          | \$320,000   | \$304,313   | \$624,313              |
| 2020                          | \$340,000   | \$287,813   | \$627,813              |
| 2021                          | \$360,000   | \$270,313   | \$630,313              |
| 2022                          | \$385,000   | \$251,688   | \$636,688              |
| 2023                          | \$400,000   | \$232,063   | \$632,063              |
| 2024                          | \$415,000   | \$211,688   | \$626,688              |
| 2025                          | \$440,000   | \$190,313   | \$630,313              |
| 2026                          | \$455,000   | \$167,938   | \$622,938              |
| 2027                          | \$480,000   | \$149,363   | \$629,363              |
| 2028                          | \$490,000   | \$134,813   | \$624,813              |
| 2029                          | \$510,000   | \$119,175   | \$629,175              |
| 2030                          | \$525,000   | \$102,356   | \$627,356              |
| 2031                          | \$540,000   | \$84,713    | \$624,713              |
| 2032                          | \$570,000   | \$65,625    | \$635,625              |
| 2033                          | \$305,000   | \$50,313    | \$355,313              |
| 2034                          | \$320,000   | \$39,175    | \$359,175              |
| 2035                          | \$330,000   | \$23,063    | \$353,063              |
| 2036                          | \$340,000   | \$6,375     | \$346,375              |
| TOTALS                        | \$8,310,000 | \$3,584,471 | \$11,894,471           |

(1) Debt service is allocated 50% to the Water Utility and 50% to the Sewer Utility.

#### Debt Service Coverage

A chief covenant for the City to secure State loans/grants or revenue bonds/Certificates of Participation (COPs) is to maintain a specific debt service coverage ratio. A debt service coverage ratio is a financial measure of an agency’s ability to repay outstanding debt. For the 2015 Utility Revenue Bonds, the debt service coverage ratio means that annual water net revenues (gross revenues less operating and maintenance expenses) must be at least 1.25 times the combined annual debt service payments on all

parity obligations. Failure to meet the debt service coverage ratio on an annual basis is considered to be technical default, thereby making the revenue bonds/COPs callable or payable upon demand. Thus, rates and fees must be set to meet this legal requirement. Moreover, failing to meet debt service coverage may hinder the City's ability to qualify for future bond funding.

### 3.3.7 Sewer Cash Flow Objectives

With input from City Staff, L&T developed three sewer cash flow scenarios based on the following three financial objectives. These goals are indicators of the overall fiscal health of the Sewer Utility:

1. Meet debt service coverage
  - a. The debt service coverage ratio for the 2015 bonds is 1.25x.
  - b. Ratio is calculated as Net Operating Revenue/Total Debt service
2. Meet Sewer Utility reserve targets
  - a. Operating Reserve Target = 25.0% of annual operating costs
3. Maintain positive net revenues
  - a. To ensure that the Sewer Utility is covering its cost of service
  - b. To avoid an operating deficit and dipping into reserves

### 3.3.8 Sewer Cash Flow Scenarios

The cash flow scenarios are as follows:

- *Sewer Scenario #1: No Rate Increases*
  - This scenario shows what would happen if the City did not increase the sewer rates. Without rate increases, the projections show that the Sewer Utility will continue to operate in a deficit and will not meet debt service coverage. Additionally, the Sewer Utility will draw down all of its reserves by the end of 2024/25.
- *Sewer Scenario #2: 8.0% Annual Rate Increases*
  - This scenario shows the impact to the Sewer Utility with 8.0% annual rate increases to cover operating cost inflation. With *Scenario #2*, the projections show that the Sewer Utility will continue to operate in a deficit and will not meet debt service coverage. Additionally, the Sewer Utility will draw down all of its reserves by the end of 2024/25.
- *Sewer Scenario #3: 25.0% Annual Rate Increases*
  - This scenario shows the impact to the Sewer Utility with annual 25.0% annual rate increases. With *Scenario #3*, the Sewer Utility would meet debt service coverage by 2026/27. The Sewer Utility will likely draw down its reserves by 2024/25 but will meet its operating reserve fund targets by 2029/30.

### 3.3.9 Sewer Cash Flow Assumptions

The cash flows are based on the 2021/22 budget and are based on the following assumptions:

- **Revenues**
  - Total Sewer Service Charge revenues are estimated at \$2.0 million based on the 2021/22 budget.



- Rate increases will go into effect on July 1 of each year, beginning in 2023 through 2027.
- The Capital Charge is increased by \$85,000 beginning in December 2022 and then \$170,000 in 2023/24. The total estimated increase in the Capital Charge is estimated at \$700,000 and is split evenly with the Sewer Utility.
- Interest is increased by 1% each year.
- All other revenues are increased by 3% each year.
- The Low Income Rate Assistance contribution from the General Fund remains at \$75,000 per year and is divided evenly between water and sewer.
- Growth is estimated at 0.5% each year.
- Total sewer flow is based on 2020 usage and is not anticipated to increase significantly over the next 5 years.

➤ **Expenses**

- Expenses are increased based on the escalation factors from Table 38.
- The only current debt obligation is the 2015 Utility Revenue Bonds. Total debt service is approximately \$625,000 per year and is split evenly with the Water Utility.
- Debt service coverage is estimated at 1.25x and is calculated by dividing Net Revenues by Total Debt Service.
- Assuming that the City will issue \$5 million in debt to pay for capital projects in 2027/28, total debt service is projected at \$300,000 and is split evenly with the Sewer Utility beginning in 2027/28.
- No capital project expenditures are included.
- Annual depreciation is not included.

**3.3.10 Sewer Scenario #1: Sewer Cash Flow Projection with No Rate Increases**

Table 42 forecasts the financial health of the sewer utility over the next 10 years if the City does not implement any rate increases. Using 2021/22 as the base year, the cash flow for *Sewer Scenario #1* shows that the Sewer Utility is currently operating in a deficit (line 40). Moreover, the sewer fund is not meeting its debt service coverage requirement (line 49) and will draw down reserves by the end of 2024/25 (line 42).

Without rate increases, the sewer fund will continue to miss coverage and operate in a deficit, having to draw down reserves to pay for expenses.

**Table 42: Sewer Scenario #1: No Rate Increases – Sewer Cash Flow Projection**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|  | Budget<br>2021/22 | Projected<br>2022/23 | Years 1 - 5: Proposition 218 |             |             |               |               | Years 6 - 10: Extended Projection |                |                |                |                |              |
|--|-------------------|----------------------|------------------------------|-------------|-------------|---------------|---------------|-----------------------------------|----------------|----------------|----------------|----------------|--------------|
|  |                   |                      | 2023/24                      | 2024/25     | 2025/26     | 2026/27       | 2027/28       | 2028/29                           | 2029/30        | 2030/31        | 2031/32        | 2032/33        |              |
| 1 Overall Revenue Adjustment             |                   |                      | 0.0%                         | 0.0%        | 0.0%        | 0.0%          | 0.0%          | 0.0%                              | 0.0%           | 0.0%           | 0.0%           | 0.0%           | 14.0%        |
| 2 Rate Increase Effective                |                   |                      | Jul 1, 2023                  | Jul 1, 2024 | Jul 1, 2025 | Jul 1, 2026   | Jul 1, 2027   | Jul 1, 2028                       | Jul 1, 2029    | Jul 1, 2030    | Jul 1, 2031    | Jul 1, 2032    |              |
| 4 BEGINNING FUND BALANCE                 | \$4,828,445       | \$3,591,447          | \$1,929,416                  | \$8,072     | (\$950,084) | (\$3,464,553) | (\$6,320,234) | (\$9,040,140)                     | (\$12,314,228) | (\$16,026,406) | (\$20,215,262) | (\$24,932,575) |              |
| 7 REVENUES                               |                   |                      |                              |             |             |               |               |                                   |                |                |                |                |              |
| 8 Sewer Service Charges                  | 2,000,000         | 2,000,000            | 2,000,000                    | 2,000,000   | 2,000,000   | 2,000,000     | 2,000,000     | 2,000,000                         | 2,000,000      | 2,000,000      | 2,000,000      | 2,000,000      | 2,280,000    |
| 9 Investment Earnings                    | 25,000            | 26,000               | 27,000                       | 28,000      | 29,000      | 30,000        | 31,000        | 32,000                            | 33,000         | 34,000         | 35,000         | 36,000         | 36,000       |
| 10 Sewer Connection Fees                 | 3,000             | 3,000                | 3,000                        | 3,000       | 3,000       | 3,000         | 3,000         | 3,000                             | 3,000          | 3,000          | 3,000          | 3,000          | 3,000        |
| 11 Account Open/Reconnections            | 1,500             | 2,000                | 2,000                        | 2,000       | 2,000       | 2,000         | 2,000         | 2,000                             | 2,000          | 2,000          | 2,000          | 2,000          | 2,000        |
| 12 Late Payment Charges                  | 5,000             | 5,000                | 5,000                        | 5,000       | 5,000       | 5,000         | 5,000         | 5,000                             | 5,000          | 5,000          | 5,000          | 5,000          | 5,000        |
| 13 Capital Charge (1)                    | 182,500           | 267,500              | 352,500                      | 352,500     | 352,500     | 352,500       | 502,500       | 502,500                           | 502,500        | 502,500        | 502,500        | 502,500        | 502,500      |
| 14 Transfers from Other Funds            | 37,500            | 37,500               | 37,500                       | 37,500      | 37,500      | 37,500        | 37,500        | 37,500                            | 37,500         | 37,500         | 37,500         | 37,500         | 37,500       |
| 15 Less: Low Income Rate Assistance      | (37,500)          | (37,500)             | (37,500)                     | (37,500)    | (37,500)    | (37,500)      | (37,500)      | (37,500)                          | (37,500)       | (37,500)       | (37,500)       | (37,500)       | (37,500)     |
| 16 Projected Grant Revenue               | 0                 | 0                    | 0                            | 1,250,000   | 0           | 0             | 0             | 0                                 | 0              | 0              | 0              | 0              | 0            |
| 17 Total Revenues                        | 2,217,000         | 2,303,500            | 2,389,500                    | 3,640,500   | 2,391,500   | 2,392,500     | 2,543,500     | 2,544,500                         | 2,545,500      | 2,546,500      | 2,547,500      | 2,547,500      | 2,828,500    |
| 19 EXPENSES                              |                   |                      |                              |             |             |               |               |                                   |                |                |                |                |              |
| 20 Operating & Maintenance               |                   |                      |                              |             |             |               |               |                                   |                |                |                |                |              |
| 21 Salaries                              | 450,458           | 468,000              | 487,000                      | 506,000     | 526,000     | 547,000       | 569,000       | 592,000                           | 616,000        | 641,000        | 667,000        | 694,000        | 694,000      |
| 22 Payroll Taxes                         | 6,188             | 6,000                | 6,000                        | 6,000       | 6,000       | 6,000         | 6,000         | 6,000                             | 6,000          | 6,000          | 6,000          | 6,000          | 6,000        |
| 23 Benefits                              | 245,581           | 255,000              | 265,000                      | 276,000     | 287,000     | 298,000       | 310,000       | 322,000                           | 335,000        | 348,000        | 362,000        | 376,000        | 376,000      |
| 24 Insurance                             | 51,287            | 56,000               | 59,000                       | 62,000      | 65,000      | 68,000        | 71,000        | 75,000                            | 79,000         | 83,000         | 87,000         | 91,000         | 91,000       |
| 25 Supplies and Services                 | 1,918,359         | 2,115,000            | 2,327,000                    | 2,560,000   | 2,816,000   | 3,098,000     | 3,408,000     | 3,749,000                         | 4,124,000      | 4,536,000      | 4,990,000      | 5,489,000      | 5,489,000    |
| 26 Admin Charges and Credit              | 463,781           | 482,000              | 501,000                      | 521,000     | 542,000     | 564,000       | 587,000       | 610,000                           | 634,000        | 659,000        | 685,000        | 712,000        | 712,000      |
| 27 Subtotal O&M                          | 3,135,654         | 3,382,000            | 3,645,000                    | 3,931,000   | 4,242,000   | 4,581,000     | 4,951,000     | 5,354,000                         | 5,794,000      | 6,273,000      | 6,797,000      | 7,368,000      | 7,368,000    |
| 29 Net Operating Revenues                | (918,654)         | (1,078,500)          | (1,255,500)                  | (290,500)   | (1,850,500) | (2,188,500)   | (2,407,500)   | (2,809,500)                       | (3,248,500)    | (3,726,500)    | (4,249,500)    | (4,539,500)    | (4,539,500)  |
| 31 Debt Service                          |                   |                      |                              |             |             |               |               |                                   |                |                |                |                |              |
| 32 2015 Utility Bonds                    | 318,344           | 316,031              | 313,344                      | 315,156     | 311,469     | 314,681       | 312,406       | 314,588                           | 313,678        | 312,356        | 317,813        | 158,906        | 158,906      |
| 33 New Bonds (2)                         | 0                 | 0                    | 0                            | 0           | 0           | 0             | 0             | 150,000                           | 150,000        | 150,000        | 150,000        | 150,000        | 150,000      |
| 34 Subtotal Debt Service                 | 318,344           | 316,031              | 313,344                      | 315,156     | 311,469     | 314,681       | 312,406       | 464,588                           | 463,678        | 462,356        | 467,813        | 308,906        | 308,906      |
| 36 Capital Projects                      | 0                 | 267,500              | 352,500                      | 352,500     | 352,500     | 352,500       | 0             | 0                                 | 0              | 0              | 0              | 0              | 0            |
| 38 Total Expenses                        | 3,453,998         | 3,965,531            | 4,310,844                    | 4,598,656   | 4,905,969   | 5,248,181     | 5,263,406     | 5,818,588                         | 6,257,678      | 6,735,356      | 7,264,813      | 7,676,906      | 7,676,906    |
| 40 Net Revenues                          | (1,236,998)       | (1,662,031)          | (1,921,344)                  | (958,156)   | (2,514,469) | (2,855,681)   | (2,719,906)   | (3,274,088)                       | (3,712,178)    | (4,188,856)    | (4,717,313)    | (4,848,406)    | (4,848,406)  |
| 42 ENDING FUND BALANCE                   | 3,591,447         | 1,929,416            | 8,072                        | (950,084)   | (3,464,553) | (6,320,234)   | (9,040,140)   | (12,314,228)                      | (16,026,406)   | (20,215,262)   | (24,932,575)   | (29,780,981)   | (29,780,981) |
| 44 Reserve Funds                         |                   |                      |                              |             |             |               |               |                                   |                |                |                |                |              |
| 46 Operating Reserve Target (25% of O&M) | 783,900           | 845,500              | 911,300                      | 982,800     | 1,060,500   | 1,145,300     | 1,237,800     | 1,338,500                         | 1,448,500      | 1,568,300      | 1,699,300      | 1,842,000      | 1,842,000    |
| 47 Target Met?                           | yes               | yes                  | no                           | no          | no          | no            | no            | no                                | no             | no             | no             | no             | no           |
| 49 Debt Service Coverage - 1.25x (3)     | (2.89)            | (3.41)               | (4.01)                       | (4.89)      | (5.94)      | (6.95)        | (7.71)        | (6.05)                            | (7.01)         | (8.06)         | (9.08)         | (14.70)        | (14.70)      |
| 50 Target Met?                           | no                | no                   | no                           | no          | no          | no            | no            | no                                | no             | no             | no             | no             | no           |

1 - Assumes Capital Charge will increase every 5 years. First increase will go into effect on Dec 1, 2022. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5M in new debt (combined water & sewer).  
2 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.  
3 - (Net Operating Revenue less Projected Grant Revenue) divided by (Total Debt Service)

### 3.3.11 Sewer Scenario #2: 8% Annual Rate Increases - Cash Flow Projection

Table 43 includes annual rate increases of 8.0% each year to cover operating cost inflation. With *Sewer Scenario #2*, the projections show that the Sewer Utility will continue to operate in a deficit (line 40) and will not meet debt service coverage (line 49). Additionally, the Sewer Utility will draw down all of its reserves by the end of 2024/25 (line 42).

**Table 43: Sewer Scenario #2: 8% Annual Rate Increases – Sewer Cash Flow Projection**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|  | Budget<br>2021/22 | Projected<br>2022/23 | Years 1 -5: Proposition 218 |             |             |               |               | Years 6 - 10: Extended Projection |               |                |                |                |
|--|-------------------|----------------------|-----------------------------|-------------|-------------|---------------|---------------|-----------------------------------|---------------|----------------|----------------|----------------|
|  |                   |                      | 2023/24                     | 2024/25     | 2025/26     | 2026/27       | 2027/28       | 2028/29                           | 2029/30       | 2030/31        | 2031/32        | 2032/33        |
| 1 Overall Revenue Adjustment             |                   |                      | 8.0%                        | 8.0%        | 8.0%        | 8.0%          | 8.0%          | 4.0%                              | 4.0%          | 4.0%           | 8.0%           | 8.0%           |
| 2 Rate Increase Effective                |                   |                      | Jul 1, 2023                 | Jul 1, 2024 | Jul 1, 2025 | Jul 1, 2026   | Jul 1, 2027   | Jul 1, 2028                       | Jul 1, 2029   | Jul 1, 2030    | Jul 1, 2031    | Jul 1, 2032    |
| 5 BEGINNING FUND BALANCE                 | \$4,828,445       | \$3,591,447          | \$1,929,416                 | \$168,072   | (\$457,084) | (\$2,451,553) | (\$4,585,234) | (\$6,515,140)                     | (\$8,731,228) | (\$11,263,406) | (\$14,145,262) | (\$17,290,575) |
| 7 REVENUES                               |                   |                      |                             |             |             |               |               |                                   |               |                |                |                |
| 8 Sewer Service Charges                  | 2,000,000         | 2,000,000            | 2,160,000                   | 2,333,000   | 2,520,000   | 2,722,000     | 2,940,000     | 3,058,000                         | 3,180,000     | 3,307,000      | 3,572,000      | 3,858,000      |
| 9 Investment Earnings                    | 25,000            | 26,000               | 27,000                      | 28,000      | 29,000      | 30,000        | 31,000        | 32,000                            | 33,000        | 34,000         | 35,000         | 36,000         |
| 10 Sewer Connection Fees                 | 3,000             | 3,000                | 3,000                       | 3,000       | 3,000       | 3,000         | 3,000         | 3,000                             | 3,000         | 3,000          | 3,000          | 3,000          |
| 11 Account Open/Reconnections            | 1,500             | 2,000                | 2,000                       | 2,000       | 2,000       | 2,000         | 2,000         | 2,000                             | 2,000         | 2,000          | 2,000          | 2,000          |
| 12 Late Payment Charges                  | 5,000             | 5,000                | 5,000                       | 5,000       | 5,000       | 5,000         | 5,000         | 5,000                             | 5,000         | 5,000          | 5,000          | 5,000          |
| 13 Capital Charge (1)                    | 182,500           | 267,500              | 352,500                     | 352,500     | 352,500     | 352,500       | 502,500       | 502,500                           | 502,500       | 502,500        | 502,500        | 502,500        |
| 14 Transfers from Other Funds            | 37,500            | 37,500               | 37,500                      | 37,500      | 37,500      | 37,500        | 37,500        | 37,500                            | 37,500        | 37,500         | 37,500         | 37,500         |
| 15 Less: Low Income Rate Assistance      | (37,500)          | (37,500)             | (37,500)                    | (37,500)    | (37,500)    | (37,500)      | (37,500)      | (37,500)                          | (37,500)      | (37,500)       | (37,500)       | (37,500)       |
| 16 Projected Grant Revenue               | 0                 | 0                    | 0                           | 1,250,000   | 0           | 0             | 0             | 0                                 | 0             | 0              | 0              | 0              |
| 17 Total Revenues                        | 2,217,000         | 2,303,500            | 2,549,500                   | 3,973,500   | 2,911,500   | 3,114,500     | 3,483,500     | 3,602,500                         | 3,725,500     | 3,853,500      | 4,119,500      | 4,406,500      |
| 19 EXPENSES                              |                   |                      |                             |             |             |               |               |                                   |               |                |                |                |
| 20 <u>Operating &amp; Maintenance</u>    |                   |                      |                             |             |             |               |               |                                   |               |                |                |                |
| 21 Salaries                              | 450,458           | 468,000              | 487,000                     | 506,000     | 526,000     | 547,000       | 569,000       | 592,000                           | 616,000       | 641,000        | 667,000        | 694,000        |
| 22 Payroll Taxes                         | 6,188             | 6,000                | 6,000                       | 6,000       | 6,000       | 6,000         | 6,000         | 6,000                             | 6,000         | 6,000          | 6,000          | 6,000          |
| 23 Benefits                              | 245,581           | 255,000              | 265,000                     | 276,000     | 287,000     | 298,000       | 310,000       | 322,000                           | 335,000       | 348,000        | 362,000        | 376,000        |
| 24 Insurance                             | 51,287            | 56,000               | 59,000                      | 62,000      | 65,000      | 68,000        | 71,000        | 75,000                            | 79,000        | 83,000         | 87,000         | 91,000         |
| 25 Supplies and Services                 | 1,918,359         | 2,115,000            | 2,327,000                   | 2,560,000   | 2,816,000   | 3,098,000     | 3,408,000     | 3,749,000                         | 4,124,000     | 4,536,000      | 4,990,000      | 5,489,000      |
| 26 Admin Charges and Credit              | 463,781           | 482,000              | 501,000                     | 521,000     | 542,000     | 564,000       | 587,000       | 610,000                           | 634,000       | 659,000        | 685,000        | 712,000        |
| 27 Subtotal O&M                          | 3,135,654         | 3,382,000            | 3,645,000                   | 3,931,000   | 4,242,000   | 4,581,000     | 4,951,000     | 5,354,000                         | 5,794,000     | 6,273,000      | 6,797,000      | 7,368,000      |
| 29 Net Operating Revenues                | (918,654)         | (1,078,500)          | (1,095,500)                 | 42,500      | (1,330,500) | (1,466,500)   | (1,467,500)   | (1,751,500)                       | (2,068,500)   | (2,419,500)    | (2,677,500)    | (2,961,500)    |
| 31 Debt Service                          |                   |                      |                             |             |             |               |               |                                   |               |                |                |                |
| 32 2015 Utility Bonds                    | 318,344           | 316,031              | 313,344                     | 315,156     | 311,469     | 314,681       | 312,406       | 314,588                           | 313,678       | 312,356        | 317,813        | 158,906        |
| 33 New Bonds (2)                         | 0                 | 0                    | 0                           | 0           | 0           | 0             | 150,000       | 150,000                           | 150,000       | 150,000        | 150,000        | 150,000        |
| 34 Subtotal Debt Service                 | 318,344           | 316,031              | 313,344                     | 315,156     | 311,469     | 314,681       | 462,406       | 464,588                           | 463,678       | 462,356        | 467,813        | 308,906        |
| 35 Capital Projects                      | 0                 | 267,500              | 352,500                     | 352,500     | 352,500     | 352,500       | 0             | 0                                 | 0             | 0              | 0              | 0              |
| 37 Total Expenses                        | 3,453,998         | 3,965,531            | 4,310,844                   | 4,598,656   | 4,905,969   | 5,248,181     | 5,413,406     | 5,818,588                         | 6,257,678     | 6,735,356      | 7,264,813      | 7,676,906      |
| 40 Net Revenues                          | (1,236,998)       | (1,662,031)          | (1,761,344)                 | (625,156)   | (1,994,469) | (2,133,681)   | (1,929,906)   | (2,216,088)                       | (2,532,178)   | (2,881,856)    | (3,145,313)    | (3,270,406)    |
| 42 ENDING FUND BALANCE                   | 3,591,447         | 1,929,416            | 168,072                     | (457,084)   | (2,451,553) | (4,585,234)   | (6,515,140)   | (8,731,228)                       | (11,263,406)  | (14,145,262)   | (17,290,575)   | (20,560,981)   |
| 45 Reserve Funds                         |                   |                      |                             |             |             |               |               |                                   |               |                |                |                |
| 46 Operating Reserve Target (25% of O&M) | 783,900           | 845,500              | 911,300                     | 982,800     | 1,060,500   | 1,145,300     | 1,237,800     | 1,338,500                         | 1,448,500     | 1,568,300      | 1,699,300      | 1,842,000      |
| 47 Target Met?                           | yes               | yes                  | no                          | no          | no          | no            | no            | no                                | no            | no             | no             | no             |
| 48 Debt Service Coverage - 1.25x (3)     | (2.89)            | (3.41)               | (3.50)                      | (3.83)      | (4.27)      | (4.66)        | (3.17)        | (3.77)                            | (4.46)        | (5.23)         | (5.72)         | (9.59)         |
| 49 Target Met?                           | no                | no                   | no                          | no          | no          | no            | no            | no                                | no            | no             | no             | no             |

1 - Assumes Capital Charge will increase every 5 years. First increase will go into effect on Dec 1, 2022. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5M in new debt (combined water & sewer).

2 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.

3 - (Net Operating Revenue less Projected Grant Revenue) divided by (Total Debt Service)

### 3.3.12 Sewer Scenario #3: 25% Annual Rate Increases – Cash Flow Projection

Sewer Scenario #3 includes 25.0% annual rate increases. With Sewer Scenario #3, the Sewer Utility would meet debt service coverage by 2026/27 (line 49) and would be out of the operating deficit by 2026/27 (line 42). The Sewer Utility will likely draw down its reserves by 2024/25 but will meet its operating reserve fund targets by 2029/30 (line 46).

**Table 44: Sewer Scenario #3: 25% Annual Rate Increases – Sewer Cash Flow Projection**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|  | Budget<br>2021/22 | Projected<br>2022/23 | Years 1 -5: Proposition 218 |             |             |               |               | Years 6 - 10: Extended Projection |             |             |             |             |
|--|-------------------|----------------------|-----------------------------|-------------|-------------|---------------|---------------|-----------------------------------|-------------|-------------|-------------|-------------|
|  |                   |                      | 2023/24                     | 2024/25     | 2025/26     | 2026/27       | 2027/28       | 2028/29                           | 2029/30     | 2030/31     | 2031/32     | 2032/33     |
| 1 Overall Revenue Adjustment             |                   |                      | 25.0%                       | 25.0%       | 25.0%       | 25.0%         | 25.0%         | 4.0%                              | 4.0%        | 4.0%        | 4.0%        | 4.0%        |
| 2 Rate Increase Effective                |                   |                      | Jul 1, 2023                 | Jul 1, 2024 | Jul 1, 2025 | Jul 1, 2026   | Jul 1, 2027   | Jul 1, 2028                       | Jul 1, 2029 | Jul 1, 2030 | Jul 1, 2031 | Jul 1, 2032 |
| 4  |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 5 BEGINNING FUND BALANCE                 | \$4,828,445       | \$3,591,447          | \$1,929,416                 | \$508,072   | (\$575,084) | (\$1,183,553) | (\$1,156,234) | \$77,860                          | \$1,151,772 | \$2,041,594 | \$2,718,738 | \$3,142,425 |
| 6  |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 7 REVENUES                               |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 8 Sewer Service Charges                  | 2,000,000         | 2,000,000            | 2,500,000                   | 3,125,000   | 3,906,000   | 4,883,000     | 6,104,000     | 6,348,000                         | 6,602,000   | 6,866,000   | 7,141,000   | 7,427,000   |
| 9 Investment Earnings                    | 25,000            | 26,000               | 27,000                      | 28,000      | 29,000      | 30,000        | 31,000        | 32,000                            | 33,000      | 34,000      | 35,000      | 36,000      |
| 10 Sewer Connection Fees                 | 3,000             | 3,000                | 3,000                       | 3,000       | 3,000       | 3,000         | 3,000         | 3,000                             | 3,000       | 3,000       | 3,000       | 3,000       |
| 11 Account Open/Reconnections            | 1,500             | 2,000                | 2,000                       | 2,000       | 2,000       | 2,000         | 2,000         | 2,000                             | 2,000       | 2,000       | 2,000       | 2,000       |
| 12 Late Payment Charges                  | 5,000             | 5,000                | 5,000                       | 5,000       | 5,000       | 5,000         | 5,000         | 5,000                             | 5,000       | 5,000       | 5,000       | 5,000       |
| 13 Capital Charge (1)                    | 182,500           | 267,500              | 352,500                     | 352,500     | 352,500     | 352,500       | 502,500       | 502,500                           | 502,500     | 502,500     | 502,500     | 502,500     |
| 14 Transfers from Other Funds            | 37,500            | 37,500               | 37,500                      | 37,500      | 37,500      | 37,500        | 37,500        | 37,500                            | 37,500      | 37,500      | 37,500      | 37,500      |
| 15 Less: Low Income Rate Assistance      | (37,500)          | (37,500)             | (37,500)                    | (37,500)    | (37,500)    | (37,500)      | (37,500)      | (37,500)                          | (37,500)    | (37,500)    | (37,500)    | (37,500)    |
| 16 Projected Grant Revenue               | 0                 | 0                    | 0                           | 0           | 0           | 0             | 0             | 0                                 | 0           | 0           | 0           | 0           |
| 17 Total Revenues                        | 2,217,000         | 2,303,500            | 2,889,500                   | 3,515,500   | 4,297,500   | 5,275,500     | 6,647,500     | 6,892,500                         | 7,147,500   | 7,412,500   | 7,688,500   | 7,975,500   |
| 18                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 19 EXPENSES                              |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 20 Operating & Maintenance               |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 21 Salaries                              | 450,458           | 468,000              | 487,000                     | 506,000     | 526,000     | 547,000       | 569,000       | 592,000                           | 616,000     | 641,000     | 667,000     | 694,000     |
| 22 Payroll Taxes                         | 6,188             | 6,000                | 6,000                       | 6,000       | 6,000       | 6,000         | 6,000         | 6,000                             | 6,000       | 6,000       | 6,000       | 6,000       |
| 23 Benefits                              | 245,581           | 255,000              | 265,000                     | 276,000     | 287,000     | 298,000       | 310,000       | 322,000                           | 335,000     | 348,000     | 362,000     | 376,000     |
| 24 Insurance                             | 51,287            | 56,000               | 59,000                      | 62,000      | 65,000      | 68,000        | 71,000        | 75,000                            | 79,000      | 83,000      | 87,000      | 91,000      |
| 25 Supplies and Services                 | 1,918,359         | 2,115,000            | 2,327,000                   | 2,560,000   | 2,816,000   | 3,098,000     | 3,408,000     | 3,749,000                         | 4,124,000   | 4,536,000   | 4,990,000   | 5,489,000   |
| 26 Admin Charges and Credit              | 463,781           | 482,000              | 501,000                     | 521,000     | 542,000     | 564,000       | 587,000       | 610,000                           | 634,000     | 659,000     | 685,000     | 712,000     |
| 27 Subtotal O&M                          | 3,135,654         | 3,382,000            | 3,645,000                   | 3,931,000   | 4,242,000   | 4,581,000     | 4,951,000     | 5,354,000                         | 5,794,000   | 6,273,000   | 6,797,000   | 7,368,000   |
| 28                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 29 Net Operating Revenues                | (918,654)         | (1,078,500)          | (755,500)                   | (415,500)   | 55,500      | 694,500       | 1,696,500     | 1,538,500                         | 1,353,500   | 1,139,500   | 891,500     | 607,500     |
| 30                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 31 Debt Service                          |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 32 2015 Utility Bonds                    | 318,344           | 316,031              | 313,344                     | 315,156     | 311,469     | 314,681       | 312,406       | 314,588                           | 313,678     | 312,356     | 317,813     | 158,906     |
| 33 New Bonds (2)                         | 0                 | 0                    | 0                           | 0           | 0           | 0             | 150,000       | 150,000                           | 150,000     | 150,000     | 150,000     | 150,000     |
| 34 Subtotal Debt Service                 | 318,344           | 316,031              | 313,344                     | 315,156     | 311,469     | 314,681       | 462,406       | 464,588                           | 463,678     | 462,356     | 467,813     | 308,906     |
| 35                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 36 Capital Projects                      | 0                 | 267,500              | 352,500                     | 352,500     | 352,500     | 352,500       | 0             | 0                                 | 0           | 0           | 0           | 0           |
| 37                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 38 Total Expenses                        | 3,453,998         | 3,965,531            | 4,310,844                   | 4,598,656   | 4,905,969   | 5,248,181     | 5,413,406     | 5,818,588                         | 6,257,678   | 6,735,356   | 7,264,813   | 7,676,906   |
| 39                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 40 Net Revenues                          | (1,236,998)       | (1,662,031)          | (1,421,344)                 | (1,083,156) | (608,469)   | 27,319        | 1,234,094     | 1,073,913                         | 889,822     | 677,144     | 423,688     | 298,594     |
| 41                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 42 ENDING FUND BALANCE                   | 3,591,447         | 1,929,416            | 508,072                     | (575,084)   | (1,183,553) | (1,156,234)   | 77,860        | 1,151,772                         | 2,041,594   | 2,718,738   | 3,142,425   | 3,441,019   |
| 43                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 44 Reserve Funds                         |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 45 Operating Reserve Target (25% of O&M) | 783,900           | 845,500              | 911,300                     | 982,800     | 1,060,500   | 1,145,300     | 1,237,800     | 1,338,500                         | 1,448,500   | 1,568,300   | 1,699,300   | 1,842,000   |
| 46 Target Met?                           | yes               | yes                  | no                          | no          | no          | no            | no            | no                                | yes         | yes         | yes         | yes         |
| 47                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 48 Debt Service Coverage - 1.25x (3)     | (2.89)            | (3.41)               | (2.41)                      | (1.32)      | 0.18        | 2.21          | 3.67          | 3.31                              | 2.92        | 2.46        | 1.91        | 1.97        |
| 49 Target Met?                           | no                | no                   | no                          | no          | no          | yes           | yes           | yes                               | yes         | yes         | yes         | yes         |
| 50                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |
| 51                                       |                   |                      |                             |             |             |               |               |                                   |             |             |             |             |

1 - Assumes Capital Charge will increase every 5 years. First increase will go into effect on Dec 1, 2022. Second increase is anticipated in 2027/28 and assumes that the City will issue \$5M in new debt (combined water & sewer).

2 - Total debt service for New Bonds is estimated at \$300,000 and is split evenly with the Sewer Utility.

3 - (Net Operating Revenue less Projected Grant Revenue) divided by (Total Debt Service)

### 3.3.13 Sewer Scenario Comparison

Table 45 includes a summary of the proposed rate adjustments and the three financial goals for all three scenarios. Based on the proposed rate adjustments, only *Sewer Scenario #3: 25% Annual Rate Increases* would allow the Sewer Utility to meet its debt service coverage ratio and have positive net revenues by 2027/28.

**Table 45: Sewer Scenario Comparison  
City of Brisbane  
Sewer Utility Rate Study 2022**

#### GOAL 1 : MEET DEBT SERVICE COVERAGE

|   | Projected<br>2022/23 | Proposed     |              |              |              |              |
|---|----------------------|--------------|--------------|--------------|--------------|--------------|
|   |                      | 2023/24      | 2024/25      | 2025/26      | 2026/27      | 2027/28      |
| Debt Service Coverage Ratio Required                        | 1.25                 | 1.25         | 1.25         | 1.25         | 1.25         | 1.25         |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>         | (3.41)<br>no         | (4.01)<br>no | (4.89)<br>no | (5.94)<br>no | (6.95)<br>no | (7.71)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i>  | (3.41)<br>no         | (3.50)<br>no | (3.83)<br>no | (4.27)<br>no | (4.66)<br>no | (3.17)<br>no |
| Scenario 3: 25% Annual Rate Increases<br><i>Target Met?</i> | (3.41)<br>no         | (2.41)<br>no | (1.32)<br>no | 0.18<br>no   | 2.21<br>yes  | 3.67<br>yes  |

#### GOAL 2: MEET SEWER RESERVE FUND TARGET

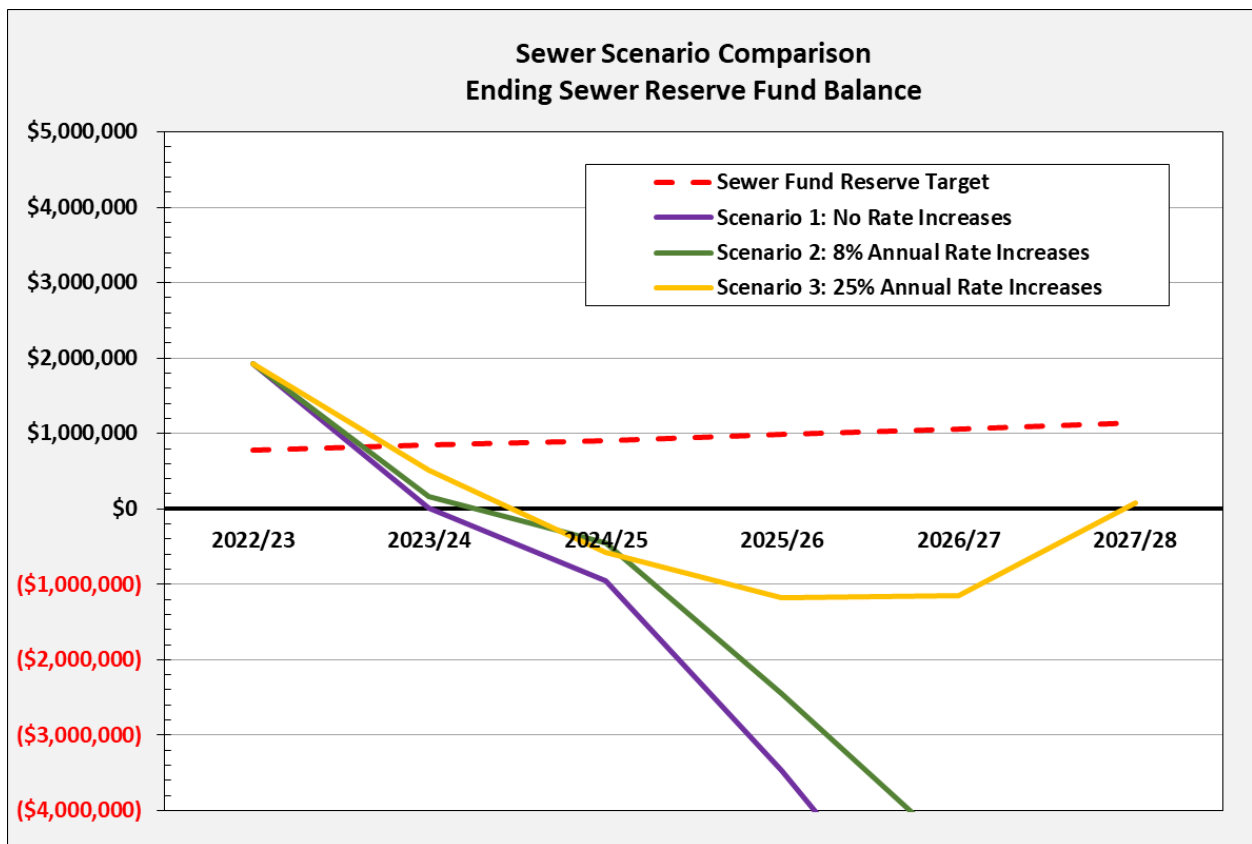
|   | Projected<br>2022/23 | Proposed        |                   |                     |                     |                     |
|---|----------------------|-----------------|-------------------|---------------------|---------------------|---------------------|
|   |                      | 2023/24         | 2024/25           | 2025/26             | 2026/27             | 2027/28             |
| Sewer Fund Reserve Target                                   | \$783,900            | \$845,500       | \$911,300         | \$982,800           | \$1,060,500         | \$1,145,300         |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>         | \$1,929,416<br>no    | \$8,072<br>no   | (\$950,084)<br>no | (\$3,464,553)<br>no | (\$6,320,234)<br>no | (\$9,040,140)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i>  | \$1,929,416<br>no    | \$168,072<br>no | (\$457,084)<br>no | (\$2,451,553)<br>no | (\$4,585,234)<br>no | (\$6,515,140)<br>no |
| Scenario 3: 25% Annual Rate Increases<br><i>Target Met?</i> | \$1,929,416<br>no    | \$508,072<br>no | (\$575,084)<br>no | (\$1,183,553)<br>no | (\$1,156,234)<br>no | \$77,860<br>no      |

#### GOAL 3: POSITIVE TOTAL NET REVENUES

|   | Projected<br>2022/23 | Proposed            |                     |                     |                     |                     |
|---|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|   |                      | 2023/24             | 2024/25             | 2025/26             | 2026/27             | 2027/28             |
| Scenario 1: No Rate Increases<br><i>Target Met?</i>         | (\$1,662,031)<br>no  | (\$1,921,344)<br>no | (\$958,156)<br>no   | (\$2,514,469)<br>no | (\$2,855,681)<br>no | (\$2,719,906)<br>no |
| Scenario 2: 8% Annual Rate Increases<br><i>Target Met?</i>  | (\$1,662,031)<br>no  | (\$1,761,344)<br>no | (\$625,156)<br>no   | (\$1,994,469)<br>no | (\$2,133,681)<br>no | (\$1,929,906)<br>no |
| Scenario 3: 25% Annual Rate Increases<br><i>Target Met?</i> | (\$1,662,031)<br>no  | (\$1,421,344)<br>no | (\$1,083,156)<br>no | (\$608,469)<br>no   | \$27,319<br>yes     | \$1,234,094<br>yes  |

Figure 8 graphically shows the projected total ending reserve fund balance under each scenario. The red dotted line represents the total reserve fund target. The purple line represents *Sewer Scenario #1: No Rate Increases*. The green line represents *Sewer Scenario #2: 8.0% Annual Rate Increases*. The yellow line represents *Sewer Scenario #3: 25.0% Annual Rate Increases*. It is projected that the Sewer Utility will reverse the operating deficit by the end of 2027/28 with *Sewer Scenario #3*.

**Figure 8: Sewer Scenario Comparison - Ending Water Fund Reserve Fund Balance**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**



## 3.4 Sewer Cost Allocation

The revenue requirements detailed in the previous section determine the amount of revenue to be recovered from sewer rates. The cost of service allocation determines how revenues will be recovered from customers based on their estimated impact on the sewer system. Proposition 218 requires that agencies providing “property-related services” (including sewer service) set rates and charges that are based on the cost of providing those services.

### 3.4.1 Overview of Sewer Cost Allocation Methodology

The determination of the sewer flows, sewer loadings, and the revenue requirements of the Sewer Utility provide the basis for performing the cost of service analysis. The concept of proportionate allocation to each customer class indicates that allocations should take into consideration the quantity of effluent a customer contributes in addition to the strength of sewer.

The key factors used to assign sewer utility costs are estimated effluent (flow) going to the wastewater treatment plant and effluent strengths, measured in biochemical oxygen demand (BOD) and total suspended solids (TSS). Higher levels of BOD or TSS typically equate to increased treatment costs. The total revenue requirement shown in the sewer cash flow projections is the net cost of providing service and is allocated to the flow, BOD, and TSS parameters. These allocations are then used as the basis to develop unit rates for the sewer parameters and to assign costs to each customer class in proportion to the sewer services rendered.

Using the 2021/22 budget as the base year, sewer expenses are allocated to the following categories (a) *Base*, (b) *Flow*, and (c) *Strength* which is typically measured in biochemical oxygen demand (BOD) and total suspended solids (TSS).

- *Base Costs*: Base costs represent the fixed expenditures of the sewer utility, including personnel costs and overhead expenses. These fixed costs are allocated based on the total number of sewer accounts or meters.
- *Flow Costs*: Volume- or flow-related costs that vary with the total quantity of wastewater collected. Because most agencies do not meter wastewater discharges, metered water consumption is used to estimate contributed average wastewater volume units of service.
- *Strength Costs*: Strength-related costs are those expenditures associated with the additional handling and treatment of high strength sewer. Sewer strength is typically measured in BOD and TSS. Increased levels of BOD or TSS typically equate to increased treatment costs.

### 3.4.2 Current Sewer Service Revenues – Fixed vs Variable Revenue Recovery

Table 46 summarizes the percentages of Sewer Service Revenues currently derived from the Fixed Charges vs. Variable Charges. On average, the City collects roughly 40.0% of total Sewer Service Revenues from the Fixed Charge and 60.0% from the Variable Charges. Based on input from staff, the City would like to transition to a 30% fixed / 70% variable revenue recovery because the largest expense for the Sewer Utility is treatment costs which vary each year based on the rates set by the City of San Francisco.

**Table 46: Current Sewer Service Revenues – Fixed vs. Variable Revenue Recovery  
City of Brisbane  
Sewer Utility Rate Study 2022**

|   | Fixed Charges    | Variable Charges | Total Sewer Service Charge Revenues | % of Total   |
|---|------------------|------------------|-------------------------------------|--------------|
| <b>Total Revenues City vs. GVMID</b>    |                  |                  |                                     |              |
| City                                    | \$506,195        | \$706,101        | \$1,212,295                         | 59.8%        |
| <u>GVMID</u>                            | <u>\$286,361</u> | <u>\$526,929</u> | <u>\$813,290</u>                    | <u>40.2%</u> |
| Total Sewer Service Charge Revenues     | \$792,556        | \$1,233,030      | \$2,025,585                         | 100.0%       |
| <i>% of Total</i>                       | <i>39.1%</i>     | <i>60.9%</i>     | <i>100.0%</i>                       |              |
| <b>Total Revenues by Customer Class</b> |                  |                  |                                     |              |
| Residential                             | \$689,664        | \$407,878        | \$1,097,542                         | 54.2%        |
| Commercial                              |                  |                  |                                     |              |
| Standard                                | \$88,842         | \$295,333        | \$384,175                           | 19.0%        |
| Medium                                  | \$3,306          | \$34,017         | \$37,323                            | 1.8%         |
| <u>Heavy</u>                            | <u>\$10,744</u>  | <u>\$495,801</u> | <u>\$506,545</u>                    | <u>25.0%</u> |
| Subtotal Commercial                     | \$102,892        | \$825,151        | \$928,043                           | 45.8%        |
| Total Sewer Service Charge Revenues     | \$792,556        | \$1,233,030      | \$2,025,585                         | 100%         |
| <i>% of Total</i>                       | <i>39.1%</i>     | <i>60.9%</i>     | <i>100.0%</i>                       |              |

Source: Utility Billing Data 2018-2020 Water & sewer Export



### 3.4.3 Cost Allocation

Table 47 summarizes the cost allocation for a 30.0% fixed / 70.0% variable revenue recovery based on staff input. These allocations are then used as the basis to develop unit rates for each charge.

**Table 47: Sewer Cost Allocation – 30% Fixed/70% Variable  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Expenses                        | FY2022/23<br>Budget | Cost Allocation - % |              |              |              |               | Cost Allocation - \$ |                  |                  |                  |                    |
|---------------------------------|---------------------|---------------------|--------------|--------------|--------------|---------------|----------------------|------------------|------------------|------------------|--------------------|
|                                 |                     | Base                | Flow         | BOD          | TSS          | Total         | Base                 | Flow             | BOD              | TSS              | Total              |
| <i>Operating Expenses</i>       |                     |                     |              |              |              |               |                      |                  |                  |                  |                    |
| Salaries                        | \$468,000           | 30%                 | 23%          | 23%          | 23%          | 100%          | \$140,400            | \$109,200        | \$109,200        | \$109,200        | \$468,000          |
| Payroll Taxes                   | \$6,000             | 30%                 | 23%          | 23%          | 23%          | 100%          | \$1,800              | \$1,400          | \$1,400          | \$1,400          | \$6,000            |
| Benefits                        | \$255,000           | 30%                 | 23%          | 23%          | 23%          | 100%          | \$76,500             | \$59,500         | \$59,500         | \$59,500         | \$255,000          |
| Insurance                       | \$56,000            | 30%                 | 23%          | 23%          | 23%          | 100%          | \$16,800             | \$13,067         | \$13,067         | \$13,067         | \$56,000           |
| Supplies and Services           | \$2,115,000         | 30%                 | 23%          | 23%          | 23%          | 100%          | \$634,500            | \$493,500        | \$493,500        | \$493,500        | \$2,115,000        |
| <u>Admin Charges and Credit</u> | <u>\$482,000</u>    | 30%                 | 23%          | 23%          | 23%          | 100%          | <u>\$144,600</u>     | <u>\$112,467</u> | <u>\$112,467</u> | <u>\$112,467</u> | <u>\$482,000</u>   |
| Subtotal Operating Expenses     | \$3,382,000         |                     |              |              |              |               | \$1,014,600          | \$789,133        | \$789,133        | \$789,133        | \$3,382,000        |
| <i>Debt Service</i>             |                     |                     |              |              |              |               |                      |                  |                  |                  |                    |
| 2015 Utility Bonds              | \$316,031           | 30%                 | 23%          | 23%          | 23%          | 100%          | \$94,809             | \$73,741         | \$73,741         | \$73,741         | \$316,031          |
| <u>New Bonds</u>                | <u>\$0</u>          | 30%                 | 23%          | 23%          | 23%          | 100%          | <u>\$0</u>           | <u>\$0</u>       | <u>\$0</u>       | <u>\$0</u>       | <u>\$0</u>         |
| Subtotal Debt Service           | \$316,031           |                     |              |              |              |               | \$94,809             | \$73,741         | \$73,741         | \$73,741         | \$316,031          |
| <b>Total Allocation</b>         | <b>\$3,698,031</b>  | <b>30.0%</b>        | <b>23.3%</b> | <b>23.3%</b> | <b>23.3%</b> | <b>100.0%</b> | <b>\$1,109,409</b>   | <b>\$862,874</b> | <b>\$862,874</b> | <b>\$862,874</b> | <b>\$3,698,031</b> |

### 3.5 Sewer Rate Design

The cost of service analysis calculated the revenue requirements for each customer class. The next step is rate design which determines how those revenue requirements are collected from each class based on their estimated impact on the sewer system.

The proposed sewer rate structure is as follows:

- Fixed Charges
  - All customer classes will continue to pay the same bimonthly flat charge.
  
- Variable Charges
  - Eliminate tiered rates for all customers and transition to single tier based on customer strength. Tiers are typically utilized for water rates to encourage conservation and are less relevant to sewer flow.
  - Residential customers will continue to only be charged for winter water use (October through January) while commercial customers will be charged for all consumption.

### 3.5.1 Sewer Flow and Loadings

Table 48 summarizes the flow and strength characteristics by customer class. Sewer flow is based on the City's 2019/20 billing data. The strength factors and sewer loadings are based on the guidelines from the State Water Resources Control Council (SWRCB) Revenue Program and standards utilized by other wastewater agencies.

**Table 48: Sewer Flow and Loadings  
City of Brisbane  
Sewer Utility Rate Study 2022**

| Customer Class      | BASE      | FLOW           |             | BOD             |                | TSS             |                |
|---------------------|-----------|----------------|-------------|-----------------|----------------|-----------------|----------------|
|                     | Accounts  | Flow (ccf) (1) | Flow (MG)   | Strength (mg/l) | Loadings (lbs) | Strength (mg/l) | Loadings (lbs) |
| Residential         | 1,669     | 89,719         | 67.1        | 165             | 92,350         | 165             | 92,350         |
| Standard Commercial | 208       | 37,290         | 27.9        | 200             | 46,525         | 200             | 46,525         |
| Medium Commercial   | 6         | 4,261          | 3.2         | 300             | 7,974          | 300             | 7,974          |
| Heavy Commercial    | <u>28</u> | <u>41,651</u>  | <u>31.2</u> | 400             | <u>103,933</u> | 400             | <u>103,933</u> |
| Total               | 1,911     | 172,921        | 129.3       |                 | 250,783        |                 | 250,783        |

1 - Based on 2019/20 billing data

### 3.5.2 Projected Sewer Accounts & Sewer Flow

Table 49 shows a projection of sewer accounts, flow, and loadings for the rate study period through 2027/28. Growth is estimated at 0.5% each year while sewer flow is anticipated to increase by 2.0% annually beginning in 2022/23.

**Table 49: Projected Growth, Sewer Flow, and Loadings**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|                              | Actual<br>2019/20 | PROJECTED      |                |                | PROJECTED - RATE STUDY PERIOD |                |                |                |                |
|------------------------------|-------------------|----------------|----------------|----------------|-------------------------------|----------------|----------------|----------------|----------------|
|                              |                   | 2020/21        | 2021/22        | 2022/23        | 2023/24                       | 2024/25        | 2025/26        | 2026/27        | 2027/28        |
| <b>NUMBER OF ACCOUNTS</b>    |                   |                |                |                |                               |                |                |                |                |
| Increase %                   |                   | 0.50%          | 0.50%          | 0.50%          | 0.50%                         | 0.50%          | 0.50%          | 0.50%          | 0.50%          |
| Residential                  | 1,669             | 1,677          | 1,686          | 1,694          | 1,703                         | 1,711          | 1,720          | 1,728          | 1,737          |
| Standard Commercial          | 215               | 216            | 217            | 218            | 219                           | 220            | 222            | 223            | 224            |
| Medium Commercial            | 8                 | 8              | 8              | 8              | 8                             | 8              | 8              | 8              | 8              |
| <u>Heavy Commercial</u>      | <u>26</u>         | <u>26</u>      | <u>26</u>      | <u>26</u>      | <u>27</u>                     | <u>27</u>      | <u>27</u>      | <u>27</u>      | <u>27</u>      |
| Total Sewer Accounts         | 1,918             | 1,928          | 1,937          | 1,947          | 1,957                         | 1,966          | 1,976          | 1,986          | 1,996          |
| <b>SEWER FLOW (ccf)</b>      |                   |                |                |                |                               |                |                |                |                |
| Increase %                   |                   | 0.00%          | 0.00%          | 2.00%          | 2.00%                         | 2.00%          | 2.00%          | 2.00%          | 2.00%          |
| Residential                  | 89,719            | 90,000         | 90,000         | 92,000         | 94,000                        | 96,000         | 98,000         | 100,000        | 102,000        |
| Standard Commercial          | 37,290            | 37,000         | 37,000         | 38,000         | 39,000                        | 40,000         | 41,000         | 42,000         | 43,000         |
| Medium Commercial            | 4,261             | 4,000          | 4,000          | 4,000          | 4,000                         | 4,000          | 4,000          | 4,000          | 4,000          |
| <u>Heavy Commercial</u>      | <u>41,651</u>     | <u>42,000</u>  | <u>42,000</u>  | <u>43,000</u>  | <u>44,000</u>                 | <u>45,000</u>  | <u>46,000</u>  | <u>47,000</u>  | <u>48,000</u>  |
| Total Estimated Flow (ccf)   | 172,921           | 173,000        | 173,000        | 177,000        | 181,000                       | 185,000        | 189,000        | 193,000        | 197,000        |
| <b>SEWER LOADINGS (mg/l)</b> |                   |                |                |                |                               |                |                |                |                |
| Increase %                   |                   | 0.00%          | 0.00%          | 2.00%          | 2.00%                         | 2.00%          | 2.00%          | 2.00%          | 2.00%          |
| Residential                  | 92,350            | 92,000         | 92,000         | 94,000         | 96,000                        | 98,000         | 100,000        | 102,000        | 104,000        |
| Standard Commercial          | 46,525            | 47,000         | 47,000         | 48,000         | 49,000                        | 50,000         | 51,000         | 52,000         | 53,000         |
| Medium Commercial            | 7,974             | 8,000          | 8,000          | 8,000          | 8,000                         | 8,000          | 8,000          | 8,000          | 8,000          |
| <u>Heavy Commercial</u>      | <u>103,933</u>    | <u>104,000</u> | <u>104,000</u> | <u>106,000</u> | <u>108,000</u>                | <u>110,000</u> | <u>112,000</u> | <u>114,000</u> | <u>116,000</u> |
| Total Estimated Loadings     | 250,783           | 251,000        | 251,000        | 256,000        | 261,000                       | 266,000        | 271,000        | 276,000        | 281,000        |

### 3.6 Sewer Rate Design for Scenario #3

#### 3.6.1 Scenario #3: Sewer Rate Derivation

Table 50 details the rate derivation for the Fixed Charge for *Sewer Scenario #3* based on a 30.0% fixed / 70.0% variable revenue recovery. For the rate study period, the “Fixed Charge Revenue Requirement” for each year is divided by the “Total Number of Accounts” to derive a “Bimonthly Fixed Charge per Account.” The proposed 2023/24 Fixed Charge is \$64.20, representing a \$4.67 (or 6.8%) decrease from the current Fixed Charge of \$68.87.

The rates have been calculated to increase total Sewer Service Revenues by 25.0% each year. However, for 2023/24, the proposed revenue adjustments in the cash flow do not directly correlate to the same increase in rates because of the shift to a 30% fixed/70% variable revenue recovery.

**Table 50: Sewer Flat Charge Rate Derivation**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|  | Current        | PROJECTED - RATE STUDY PERIOD |                |                |                 |                 |
|--|----------------|-------------------------------|----------------|----------------|-----------------|-----------------|
|  |                | 2023/24                       | 2024/25        | 2025/26        | 2026/27         | 2027/28         |
| <b>TOTAL REVENUE REQUIREMENT (1)</b>     |                | \$2,500,000                   | \$3,125,000    | \$3,906,000    | \$4,883,000     | \$6,104,000     |
| <b>Fixed/Variable Allocation</b>         |                |                               |                |                |                 |                 |
| Fixed Charge                             |                | 30.0%                         | 30.0%          | 30.0%          | 30.0%           | 30.0%           |
| Variable Charge                          |                | 70.0%                         | 70.0%          | 70.0%          | 70.0%           | 70.0%           |
| <b>FIXED SERVICE CHARGE CALCULATION</b>  |                |                               |                |                |                 |                 |
| Fixed Revenue Requirement                |                | \$750,000                     | \$937,500      | \$1,171,800    | \$1,464,900     | \$1,831,200     |
| Total Number of Accounts                 | 1,918          | 1,947                         | 1,957          | 1,966          | 1,976           | 1,986           |
| <b>Bimonthly Flat Charge per Account</b> | <b>\$68.87</b> | <b>\$64.20</b>                | <b>\$79.86</b> | <b>\$99.32</b> | <b>\$123.54</b> | <b>\$153.66</b> |
| <i>% Change</i>                          |                | -6.8%                         | 24.4%          | 24.4%          | 24.4%           | 24.4%           |

1 – Table 44, Line 5

### 3.6.2 Sewer Scenario #3: Variable Rate Derivation

Table 51 demonstrates how the Variable Charge for 2023/24 is calculated for *Sewer Scenario #3* based on a 30.0% fixed / 70.0% variable revenue recovery. The total “Variable Charge Recovery \$” is first apportioned to flow, BOD and TSS (50.0% to Flow, 25.0 % to BOD, and 25.0% to SS). The City of San Francisco currently does not charge based on effluent strength but may do so in the future. Therefore, costs are evenly split between flow costs and strength costs. Next, the “Cost Allocation \$” for each parameter is then divided by its “Total Annual Loadings” (Table 49) to derive unit costs. The unit costs for the remaining years in the study period are derived in the same manner, and the tables are included in the appendix.

**Table 51: Sewer Scenario #3 - Sewer Variable Unit Rate Derivation for 2023/24**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

|                                       |                   |                  |                  |
|---------------------------------------|-------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                   |                  |                  |
| FY2023/24 Revenue Requirement (1)     |                   | \$2,500,000      |                  |
| Variable Charge Recovery %            |                   | 70%              |                  |
| Variable Charge Recovery \$           |                   | \$1,750,000      |                  |
| <b>Allocation to Flow, BOD, SS</b>    | <u>Flow</u>       | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%               | 25%              | 25%              |
| Cost Allocation \$                    | \$875,000         | \$438,000        | \$438,000        |
| Total Annual Loadings                 | 181,000           | 261,000          | 261,000          |
| Units                                 | ccf               | lbs              | lbs              |
| Unit Cost                             | \$4.83<br>per ccf | \$1.68<br>per lb | \$1.68<br>per lb |

1 - Table 44, Line 10

3 - Table 49

The unit rates from Table 51 are multiplied by each customer class’s respective loadings to determine a “Total Variable Rate per ccf” for each customer class, see Table 52. The Variable Rate is the sum of the flow, BOD, and TSS unit costs. For Residential customers, the proposed “Total Variable Rate” for 2023/24 is \$8.29 per ccf. The Variable Rates for the remaining years in the study period are derived in the same manner and the tables are included in the appendix.

**Table 52: Sewer Scenario #3 - Volume Rate by Customer Classes for 2023/24**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) (1) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-----------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                              | BOD    | SS     |                             |
|                     |                            |     | \$4.83                            | \$1.68 | \$1.68 |                             |
| Residential         | 165                        | 165 | \$4.83                            | \$1.73 | \$1.73 | \$8.29                      |
| Standard Commercial | 200                        | 200 | \$4.83                            | \$2.09 | \$2.09 | \$9.02                      |
| Medium Commercial   | 300                        | 300 | \$4.83                            | \$3.14 | \$3.14 | \$11.12                     |
| Heavy Commercial    | 400                        | 400 | \$4.83                            | \$4.19 | \$4.19 | \$13.21                     |

1 - Table 51

### 3.6.3 Sewer Scenario #3: Proposed Bimonthly Sewer Rates

Table 53 summarizes the proposed bimonthly sewer rates. The proposed Flat Charges are the same for all customers. The proposed Variable Charges vary based on customer class.

**Table 53: Proposed Bi-Monthly Sewer Rates  
City of Brisbane  
Sewer Utility Rate Study 2022**

|                               | RATE STUDY PERIOD |              |              |              |              |
|-------------------------------|-------------------|--------------|--------------|--------------|--------------|
|                               | July 1, 2023      | July 1, 2024 | July 1, 2025 | July 1, 2026 | July 1, 2027 |
| <b>RESIDENTIAL (1)</b>        |                   |              |              |              |              |
| Flat Charge                   | \$64.20           | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge (per ccf) (2) | \$8.29            | \$10.15      | \$12.43      | \$15.23      | \$18.67      |
| <b>COMMERCIAL</b>             |                   |              |              |              |              |
| <b>Standard</b>               |                   |              |              |              |              |
| Flat Charge                   | \$64.20           | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge (per ccf)     | \$9.02            | \$11.04      | \$13.53      | \$16.59      | \$20.33      |
| <b>Medium</b>                 |                   |              |              |              |              |
| Flat Charge                   | \$64.20           | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge (per ccf)     | \$11.12           | \$13.61      | \$16.68      | \$20.45      | \$25.07      |
| <b>Heavy</b>                  |                   |              |              |              |              |
| Flat Charge                   | \$64.20           | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge (per ccf)     | \$13.21           | \$16.18      | \$19.83      | \$24.32      | \$29.81      |

1 - Residential bill is based on winter consumption (Oct, Nov, Dec & Jan)

2 - 1 ccf (hundred cubic feet) = 748 gallons

### 3.6.4 Sewer Scenario #3: Sewer Bill Impacts

Table 54 includes a sample of bill impacts for residential and commercial customers. For 2023/24, the proposed revenue adjustments in the cash flow do not directly correlate to the same increase in rates because the cost of service analysis reallocates the required revenue proportionate to each customer class's total flow. Therefore, actual bill impacts will vary based on customer class and consumption.

**Table 54: Sewer Scenario #3 – Sample Bimonthly Sewer Bills**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**

**RESIDENTIAL BILL IMPACTS**

|                             | Bimonthly Use (ccf) | Current Bill | Proposed     |              |              |              |              |
|-----------------------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                             |                     |              | July 1, 2023 | July 1, 2024 | July 1, 2025 | July 1, 2026 | July 1, 2027 |
| <b>Residential - 4 ccf</b>  |                     |              |              |              |              |              |              |
| Fixed Charge                |                     | \$68.87      | \$64.20      | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge             |                     |              |              |              |              |              |              |
| Tier 1: 0 - 8 ccf           | 4                   | \$11.24      | \$33.16      | \$40.59      | \$49.72      | \$60.93      | \$74.67      |
| Tier 2: Over 8 ccf          | 0                   | \$0.00       |              |              |              |              |              |
| Subtotal Variable Charge    | 4                   | \$11.24      |              |              |              |              |              |
| Total Bimonthly Sewer Bill  |                     | \$80.11      | \$97.36      | \$120.45     | \$149.04     | \$184.47     | \$228.33     |
| \$ Change                   |                     |              | \$17.25      | \$23.09      | \$28.59      | \$35.43      | \$43.86      |
| % Change                    |                     |              | 21.5%        | 23.7%        | 23.7%        | 23.8%        | 23.8%        |
| <b>Residential - 10 ccf</b> |                     |              |              |              |              |              |              |
| Fixed Charge                |                     | \$68.87      | \$64.20      | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge             |                     |              |              |              |              |              |              |
| Tier 1: 0 - 8 ccf           | 8                   | \$22.48      | \$82.89      | \$101.47     | \$124.29     | \$152.32     | \$186.67     |
| Tier 2: Over 8 ccf          | 2                   | \$15.32      |              |              |              |              |              |
| Subtotal Variable Charge    | 10                  | \$37.80      |              |              |              |              |              |
| Total Bimonthly Sewer Bill  |                     | \$106.67     | \$147.09     | \$181.33     | \$223.61     | \$275.86     | \$340.33     |
| \$ Change                   |                     |              | \$40.42      | \$34.24      | \$42.28      | \$52.25      | \$64.47      |
| % Change                    |                     |              | 37.9%        | 23.3%        | 23.3%        | 23.4%        | 23.4%        |
| <b>Residential - 20 ccf</b> |                     |              |              |              |              |              |              |
| Fixed Charge                |                     | \$68.87      | \$64.20      | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge             |                     |              |              |              |              |              |              |
| Tier 1: 0 - 8 ccf           | 8                   | \$22.48      | \$165.78     | \$202.94     | \$248.58     | \$304.64     | \$373.34     |
| Tier 2: Over 8 ccf          | 12                  | \$91.92      |              |              |              |              |              |
| Subtotal Variable Charge    | 20                  | \$114.40     |              |              |              |              |              |
| Total Bimonthly Sewer Bill  |                     | \$183.27     | \$229.98     | \$282.80     | \$347.90     | \$428.18     | \$527.00     |
| \$ Change                   |                     |              | \$46.71      | \$52.82      | \$65.10      | \$80.29      | \$98.81      |
| % Change                    |                     |              | 25.5%        | 23.0%        | 23.0%        | 23.1%        | 23.1%        |

**STANDARD COMMERCIAL**

|                                     | Bimonthly Use (ccf) | Current Bill   | Proposed    |              |              |              |              |
|-------------------------------------|---------------------|----------------|-------------|--------------|--------------|--------------|--------------|
|                                     |                     |                | Jan 1, 2023 | July 1, 2023 | July 1, 2024 | July 1, 2025 | July 1, 2026 |
| <b>Standard Commercial - 10 ccf</b> |                     |                |             |              |              |              |              |
| Fixed Charge                        |                     | \$68.87        | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge                     |                     |                |             |              |              |              |              |
| Tier 1: 0 - 8 ccf                   | 8                   | \$30.72        | \$90.22     | \$110.45     | \$135.31     | \$165.85     | \$203.27     |
| Tier 2: Over 8 ccf                  | <u>2</u>            | <u>\$15.32</u> |             |              |              |              |              |
| Subtotal Variable Charge            | 10                  | \$46.04        |             |              |              |              |              |
| Total Bimonthly Sewer Bill          |                     | \$114.91       | \$154.42    | \$190.31     | \$234.63     | \$289.39     | \$356.93     |
| \$ Change                           |                     |                | \$39.51     | \$35.89      | \$44.32      | \$54.76      | \$67.54      |
| % Change                            |                     |                | 34.4%       | 23.2%        | 23.3%        | 23.3%        | 23.3%        |
| <b>Standard Commercial - 20 ccf</b> |                     |                |             |              |              |              |              |
| Fixed Charge                        |                     | \$68.87        | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge                     |                     |                |             |              |              |              |              |
| Tier 1: 0 - 8 ccf                   | 8                   | \$30.72        | \$180.44    | \$220.90     | \$270.62     | \$331.70     | \$406.53     |
| Tier 2: Over 8 ccf                  | <u>12</u>           | <u>\$91.92</u> |             |              |              |              |              |
| Subtotal Variable Charge            | 20                  | \$122.64       |             |              |              |              |              |
| Total Bimonthly Sewer Bill          |                     | \$191.51       | \$244.64    | \$300.76     | \$369.94     | \$455.24     | \$560.19     |
| \$ Change                           |                     |                | \$53.13     | \$56.12      | \$69.18      | \$85.30      | \$104.95     |
| % Change                            |                     |                | 27.7%       | 22.9%        | 23.0%        | 23.1%        | 23.1%        |

**MEDIUM COMMERCIAL**

|                                   | Bimonthly Use (ccf) | Current Bill    | Proposed    |              |              |              |              |
|-----------------------------------|---------------------|-----------------|-------------|--------------|--------------|--------------|--------------|
|                                   |                     |                 | Jan 1, 2023 | July 1, 2023 | July 1, 2024 | July 1, 2025 | July 1, 2026 |
| <b>Medium Commercial - 30 ccf</b> |                     |                 |             |              |              |              |              |
| Fixed Charge                      |                     | \$68.87         | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge                   |                     |                 |             |              |              |              |              |
| Tier 1: 0 - 8 ccf                 | 8                   | \$45.44         | \$333.47    | \$408.32     | \$500.40     | \$613.50     | \$752.06     |
| Tier 2: Over 8 ccf                | <u>22</u>           | <u>\$214.28</u> |             |              |              |              |              |
| Subtotal Variable Charge          | 30                  | \$259.72        |             |              |              |              |              |
| Total Bimonthly Sewer Bill        |                     | \$328.59        | \$397.67    | \$488.18     | \$599.72     | \$737.04     | \$905.72     |
| \$ Change                         |                     |                 | \$69.08     | \$90.51      | \$111.54     | \$137.32     | \$168.68     |
| % Change                          |                     |                 | 21.0%       | 22.8%        | 22.8%        | 22.9%        | 22.9%        |
| <b>Medium Commercial - 50 ccf</b> |                     |                 |             |              |              |              |              |
| Fixed Charge                      |                     | \$68.87         | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge                   |                     |                 |             |              |              |              |              |
| Tier 1: 0 - 8 ccf                 | 8                   | \$45.44         | \$555.78    | \$680.53     | \$834.00     | \$1,022.50   | \$1,253.43   |
| Tier 2: Over 8 ccf                | 42                  | <u>\$409.08</u> |             |              |              |              |              |
| Subtotal Variable Charge          | 50                  | \$454.52        |             |              |              |              |              |
| Total Bimonthly Sewer Bill        |                     | \$523.39        | \$619.98    | \$760.39     | \$933.32     | \$1,146.04   | \$1,407.09   |
| \$ Change                         |                     |                 | \$96.59     | \$140.41     | \$172.93     | \$212.72     | \$261.05     |
| % Change                          |                     |                 | 18.5%       | 22.6%        | 22.7%        | 22.8%        | 22.8%        |

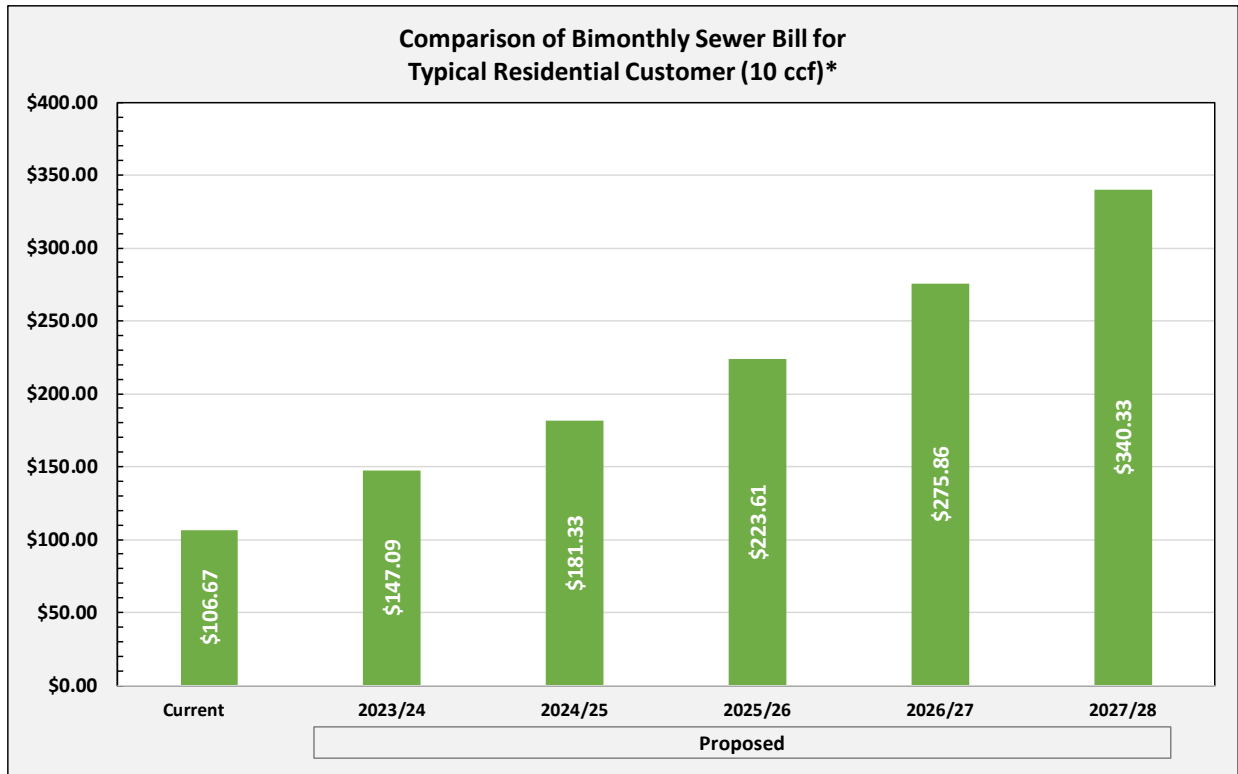


**HEAVY COMMERCIAL**

|                                   | Bimonthly<br>Use (ccf) | Current<br>Bill   | Proposed    |              |              |              |              |
|-----------------------------------|------------------------|-------------------|-------------|--------------|--------------|--------------|--------------|
|                                   |                        |                   | Jan 1, 2023 | July 1, 2023 | July 1, 2024 | July 1, 2025 | July 1, 2026 |
| <b>Heavy Commercial - 80 ccf</b>  |                        |                   |             |              |              |              |              |
| Variable Charge                   |                        | \$68.87           | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Tier 1: 0 - 8 ccf                 | 8                      | \$60.72           |             |              |              |              |              |
| Tier 2: Over 8 ccf                | 72                     | <u>\$848.51</u>   | \$1,056.75  | \$1,294.10   | \$1,586.33   | \$1,945.21   | \$2,384.85   |
| Subtotal Variable Charge          | 80                     | \$909.23          |             |              |              |              |              |
| Total Bimonthly Sewer Bill        |                        | \$978.10          | \$1,120.95  | \$1,373.96   | \$1,685.65   | \$2,068.75   | \$2,538.51   |
| \$ Change                         |                        |                   | \$142.85    | \$253.01     | \$311.69     | \$383.10     | \$469.77     |
| % Change                          |                        |                   | 14.6%       | 22.6%        | 22.7%        | 22.7%        | 22.7%        |
| <b>Heavy Commercial - 100 ccf</b> |                        |                   |             |              |              |              |              |
| Fixed Charge                      |                        | \$68.87           | \$64.20     | \$79.86      | \$99.32      | \$123.54     | \$153.66     |
| Variable Charge                   |                        |                   |             |              |              |              |              |
| Tier 1: 0 - 8 ccf                 | 8                      | \$60.72           |             |              |              |              |              |
| Tier 2: Over 8 ccf                | 92                     | <u>\$1,084.91</u> | \$1,320.94  | \$1,617.63   | \$1,982.91   | \$2,431.51   | \$2,981.07   |
| Subtotal Variable Charge          | 100                    | \$1,145.63        |             |              |              |              |              |
| Total Bimonthly Sewer Bill        |                        | \$1,214.50        | \$1,385.14  | \$1,697.49   | \$2,082.23   | \$2,555.05   | \$3,134.73   |
| \$ Change                         |                        |                   | \$170.64    | \$312.35     | \$384.75     | \$472.82     | \$579.68     |
| % Change                          |                        |                   | 14.1%       | 22.5%        | 22.7%        | 22.7%        | 22.7%        |

Figure 9 shows the proposed bimonthly sewer bill for a typical residential customer using 10 ccf per 2-month period during each year of the five-year Proposition 218 period.

**Figure 9: Comparison of Bimonthly Sewer Bill for Typical Residential Customer  
City of Brisbane  
Sewer Utility Rate Study 2022**

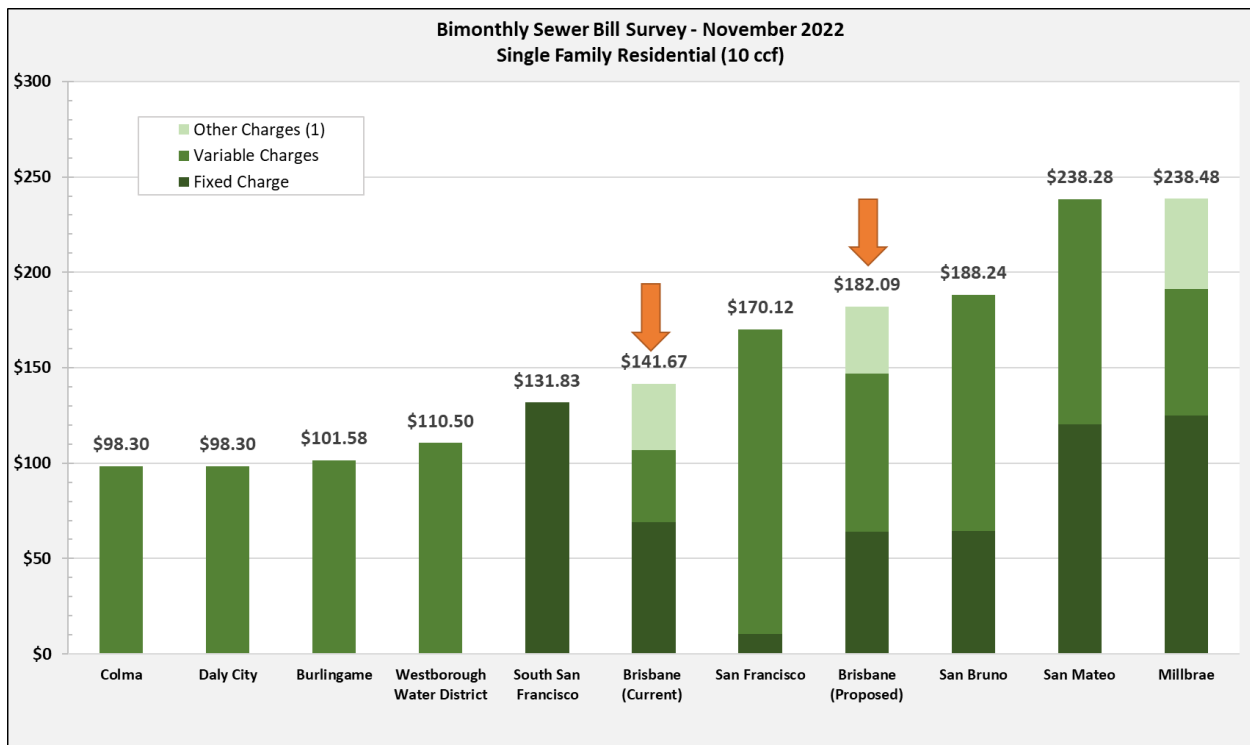


\* Does not include Capital Charge

### 3.6.5 Regional Sewer Bill Survey

Figure 10 compares the City’s current typical bimonthly residential sewer bill using 10 ccf over a 2-month period with those of surrounding agencies. The chart also includes the proposed 2023/24 bill which includes half of the Capital Projects Charge that is evenly split with the Water Bill ( $\$70/2 = \$35$ ). It should be noted that many of the agencies shown on the chart will likely also be increasing their sewer rates over the next few years.

**Figure 10: Bimonthly Sewer Bill Survey**  
**City of Brisbane**  
**Sewer Utility Rate Study 2022**



### 3.7 Sewer Low Income Discount

To comply with Proposition 218’s cost of service requirements, rate revenues from one group of customers cannot be used to subsidize the rates of another group. Instead, the City could utilize non-rate revenues, such as General Fund revenues, interest earnings, or delinquent penalties to fund a low income discount program. Moreover, to eliminate the administrative burden of the City developing its own low-income criteria, it is recommended that the City provide assistance to low income residents who meet the criteria of other local assistance programs such as PG&E’s CARE program.

The low income discount program should be reviewed annually by the City to determine whether the Sewer Utility has adequate non-rate revenues to fund the program. Because non-sewer rate revenues will be used to pay for the discount, the amount of the low income discount is based on the discretion of the City.

Table 55 calculates a sample low income discount for sewer that is funded from a General Fund transfer. This transfer is estimated at \$37,500 for the current year. The City estimates that approximately 400 customers or about 24.0% of all accounts could qualify for a discount based on the PG&E’s CARE program requirements. Based on 400 customers, the table shows a bimonthly discount of \$15.60 per customer. For an average residential customer (10 ccf bimonthly use), this equates to a 10.6% discount off the proposed bimonthly bill for July 1, 2023.

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**Table 55: Sewer Low Income Discount  
City of Brisbane  
Sewer Utility Rate Study 2022**

|  |              |
|--|--------------|
| Total Number of Residential Sewer Customers                | 1,669        |
| Estimated Number of Customers Eligible for Discount        | 400          |
| Total Est. Sewer Low Income Discount Revenue               | \$37,500     |
| Annual Discount per Customer                               | \$93.80      |
| Bimonthly Discount per Customer                            | \$15.60      |
| Proposed Average Sewer Bill for July 1, 2023               | \$147.09     |
| Proposed Average Sewer Bill with Discount for July 1, 2023 | \$131.49     |
| <i>% of Discount</i>                                       | <i>10.6%</i> |

## **SECTION 4: UTILITY FUND 540 – COMBINED CASH FLOW**

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### **4.1 Combined Cash Flow Projection**

Table 56 includes a combined Water Utility and Sewer Utility cash flow. The proposed rate increases will rectify the current operating deficit and restore financial stability to Utility Fund 540. With the proposed 9% annual water rate increases and 25% annual sewer rate increases, Fund 540 will meet debt service coverage by 2026/27. Fund 540 is projected to obtain positive net revenues by 2027/28 and will meet its fund reserve targets by 2028/29.

**Table 56: Combined Water and Sewer Cash Flow Projection**  
**City of Brisbane**  
**Water and Sewer Utility Rate Study 2022**

|   | Budget<br>2021/22 | Projected<br>2022/23 | Years 1-5: Proposition 218 |             |             |            |            | Years 6-10: Extended Projection |             |             |             |             |
|---|-------------------|----------------------|----------------------------|-------------|-------------|------------|------------|---------------------------------|-------------|-------------|-------------|-------------|
|   |                   |                      | 2023/24                    | 2024/25     | 2025/26     | 2026/27    | 2027/28    | 2028/29                         | 2029/30     | 2030/31     | 2031/32     | 2032/33     |
| 1 <b>BEGINNING FUND BALANCE</b>             | \$7,656,890       | \$6,575,087          | \$4,573,056                | \$2,853,712 | \$1,513,556 | \$699,087  | \$569,406  | \$1,959,999                     | \$3,202,412 | \$4,275,734 | \$5,147,377 | \$5,764,565 |
| 2   |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 3 <b>REVENUES</b>                           |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 4 Water Sales                               | 3,000,000         | 3,000,000            | 3,270,000                  | 3,564,000   | 3,885,000   | 4,235,000  | 4,616,000  | 4,985,000                       | 5,384,000   | 5,815,000   | 6,280,000   | 6,782,000   |
| 5 Sewer Service Charges                     | 2,000,000         | 2,000,000            | 2,500,000                  | 3,125,000   | 3,906,000   | 4,883,000  | 6,104,000  | 6,348,000                       | 6,602,000   | 6,866,000   | 7,141,000   | 7,427,000   |
| 6 Drought Reserve Charge                    | 100,000           | 100,000              | 100,000                    | 100,000     | 100,000     | 100,000    | 0          | 0                               | 0           | 0           | 0           | 0           |
| 7 Capital Charge                            | 365,000           | 535,000              | 705,000                    | 705,000     | 705,000     | 705,000    | 1,005,000  | 1,005,000                       | 1,005,000   | 1,005,000   | 1,005,000   | 1,005,000   |
| 8 Investment Earnings                       | 50,000            | 51,000               | 52,000                     | 53,000      | 54,000      | 55,000     | 56,000     | 57,000                          | 58,000      | 59,000      | 60,000      | 61,000      |
| 9 Account Open/Reconnection Fees            | 3,000             | 4,000                | 4,000                      | 4,000       | 4,000       | 4,000      | 4,000      | 4,000                           | 4,000       | 4,000       | 4,000       | 4,000       |
| 10 Late Payment Charges                     | 10,000            | 10,000               | 10,000                     | 10,000      | 10,000      | 10,000     | 10,000     | 10,000                          | 10,000      | 10,000      | 10,000      | 10,000      |
| 11 Sewer & Meter Connection Fees            | 23,000            | 23,000               | 25,000                     | 27,000      | 29,000      | 31,000     | 34,000     | 36,000                          | 39,000      | 42,000      | 45,000      | 48,000      |
| 12 Fire Service Charges                     | 115,000           | 115,000              | 125,000                    | 136,000     | 148,000     | 161,000    | 175,000    | 189,000                         | 204,000     | 220,000     | 238,000     | 257,000     |
| 13 Altamar Meter Reading Fee                | 7,500             | 8,000                | 9,000                      | 10,000      | 11,000      | 12,000     | 13,000     | 14,000                          | 15,000      | 16,000      | 17,000      | 18,000      |
| 14 Transfers from Other Funds               | 75,000            | 75,000               | 75,000                     | 75,000      | 75,000      | 75,000     | 75,000     | 75,000                          | 75,000      | 75,000      | 75,000      | 75,000      |
| 15 Less: Low Income Rate Assistance         | (75,000)          | (75,000)             | (75,000)                   | (75,000)    | (75,000)    | (75,000)   | (75,000)   | (75,000)                        | (75,000)    | (75,000)    | (75,000)    | (75,000)    |
| 16 <b>Grant Revenue</b>                     | 0                 | 0                    | 0                          | 0           | 0           | 0          | 0          | 0                               | 0           | 0           | 0           | 0           |
| 17 <b>Total Revenues</b>                    | 5,673,500         | 5,846,000            | 6,800,000                  | 7,734,000   | 8,852,000   | 10,196,000 | 12,017,000 | 12,648,000                      | 13,321,000  | 14,037,000  | 14,800,000  | 15,612,000  |
| 18  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 19 <b>EXPENSES</b>                          |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 20 <u>Operating &amp; Maintenance</u>       |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 21 Salaries                                 | 949,583           | 987,000              | 1,027,000                  | 1,068,000   | 1,110,000   | 1,154,000  | 1,200,000  | 1,248,000                       | 1,298,000   | 1,350,000   | 1,404,000   | 1,460,000   |
| 22 Payroll Taxes                            | 13,300            | 13,000               | 13,000                     | 13,000      | 13,000      | 13,000     | 13,000     | 13,000                          | 13,000      | 13,000      | 13,000      | 13,000      |
| 23 Benefits                                 | 523,326           | 544,000              | 566,000                    | 589,000     | 613,000     | 637,000    | 663,000    | 689,000                         | 717,000     | 745,000     | 775,000     | 806,000     |
| 24 Insurance                                | 110,225           | 121,000              | 127,000                    | 133,000     | 140,000     | 147,000    | 154,000    | 162,000                         | 170,000     | 179,000     | 188,000     | 197,000     |
| 25 Supplies and Services                    | 3,585,356         | 4,047,000            | 4,452,000                  | 4,898,000   | 5,388,000   | 5,927,000  | 6,520,000  | 7,172,000                       | 7,889,000   | 8,678,000   | 9,546,000   | 10,501,000  |
| 26 <u>Admin Charges and Credit</u>          | 936,825           | 969,000              | 1,003,000                  | 1,038,000   | 1,075,000   | 1,113,000  | 1,152,000  | 1,192,000                       | 1,233,000   | 1,276,000   | 1,321,000   | 1,367,000   |
| 27 <b>Subtotal O&amp;M</b>                  | 6,118,616         | 6,681,000            | 7,188,000                  | 7,739,000   | 8,339,000   | 8,991,000  | 9,702,000  | 10,476,000                      | 11,320,000  | 12,241,000  | 13,247,000  | 14,344,000  |
| 28  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 29 <b>Net Operating Revenue</b>             | (445,116)         | (835,000)            | (388,000)                  | (5,000)     | 513,000     | 1,205,000  | 2,315,000  | 2,172,000                       | 2,001,000   | 1,796,000   | 1,553,000   | 1,268,000   |
| 30  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 31 <b>Debt Service</b>                      |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 32 2015 Utility Bonds                       | 636,688           | 632,031              | 626,344                    | 630,156     | 622,469     | 629,681    | 624,406    | 629,588                         | 627,678     | 624,356     | 635,813     | 617,906     |
| 33 <u>New Bonds (1)</u>                     | 0                 | 0                    | 0                          | 0           | 0           | 0          | 300,000    | 300,000                         | 300,000     | 300,000     | 300,000     | 300,000     |
| 34 <b>Subtotal Debt Service</b>             | 636,688           | 632,031              | 626,344                    | 630,156     | 622,469     | 629,681    | 924,406    | 929,588                         | 927,678     | 924,356     | 935,813     | 617,906     |
| 35  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 36 <b>Capital Projects</b>                  | 0                 | 535,000              | 705,000                    | 705,000     | 705,000     | 705,000    | 0          | 0                               | 0           | 0           | 0           | 0           |
| 37  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 38 <b>Total Expenses</b>                    | 6,755,303         | 7,848,031            | 8,519,344                  | 9,074,156   | 9,666,469   | 10,325,681 | 10,626,406 | 11,405,588                      | 12,247,678  | 13,165,356  | 14,182,813  | 14,961,906  |
| 39  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 40 <b>Total Net Revenues</b>                | (1,081,803)       | (2,002,031)          | (1,719,344)                | (1,340,156) | (814,469)   | (129,681)  | 1,390,594  | 1,242,413                       | 1,073,322   | 871,644     | 617,188     | 650,094     |
| 41  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 42 <b>ENDING FUND BALANCE</b>               | 6,575,087         | 4,573,056            | 2,853,712                  | 1,513,556   | 699,087     | 569,406    | 1,959,999  | 3,202,412                       | 4,275,734   | 5,147,377   | 5,764,565   | 6,414,659   |
| 43  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 44  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 45 <u>Reserve Funds</u>                     |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 46 Operating Reserve Target (25% of O&M)    | 1,529,700         | 1,670,300            | 1,797,000                  | 1,934,800   | 2,084,800   | 2,247,800  | 2,425,500  | 2,619,000                       | 2,830,000   | 3,060,300   | 3,311,800   | 3,586,000   |
| 47 <u>Drought Reserve (\$700,000)</u>       | 447,499           | 547,499              | 647,499                    | 747,499     | 847,499     | 947,499    | 947,499    | 947,499                         | 947,499     | 947,499     | 947,499     | 947,499     |
| 48 <b>Total Combined Reserves</b>           | 1,977,199         | 2,217,799            | 2,444,499                  | 2,682,299   | 2,932,299   | 3,195,299  | 3,372,999  | 3,566,499                       | 3,777,499   | 4,007,799   | 4,259,299   | 4,533,499   |
| 49 <i>Target Met?</i>                       | yes               | yes                  | yes                        | no          | no          | no         | no         | yes                             | yes         | yes         | yes         | yes         |
| 50  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |
| 51 <b>Debt Service Coverage - 1.25x (2)</b> | -0.70             | -1.32                | -0.62                      | -0.01       | 0.82        | 1.91       | 2.50       | 2.34                            | 2.16        | 1.94        | 1.66        | 2.05        |
| 52 <i>Target Met?</i>                       | no                | no                   | no                         | no          | no          | yes        | yes        | yes                             | yes         | yes         | yes         | yes         |
| 53  |                   |                      |                            |             |             |            |            |                                 |             |             |             |             |

1 - Total debt service for New Bonds is estimated at \$300,000

2 - (Net Operating Revenue less Projected Grant Revenue) divided by (Total Debt Service)

## 4.2 Combined Sample Bill Impacts

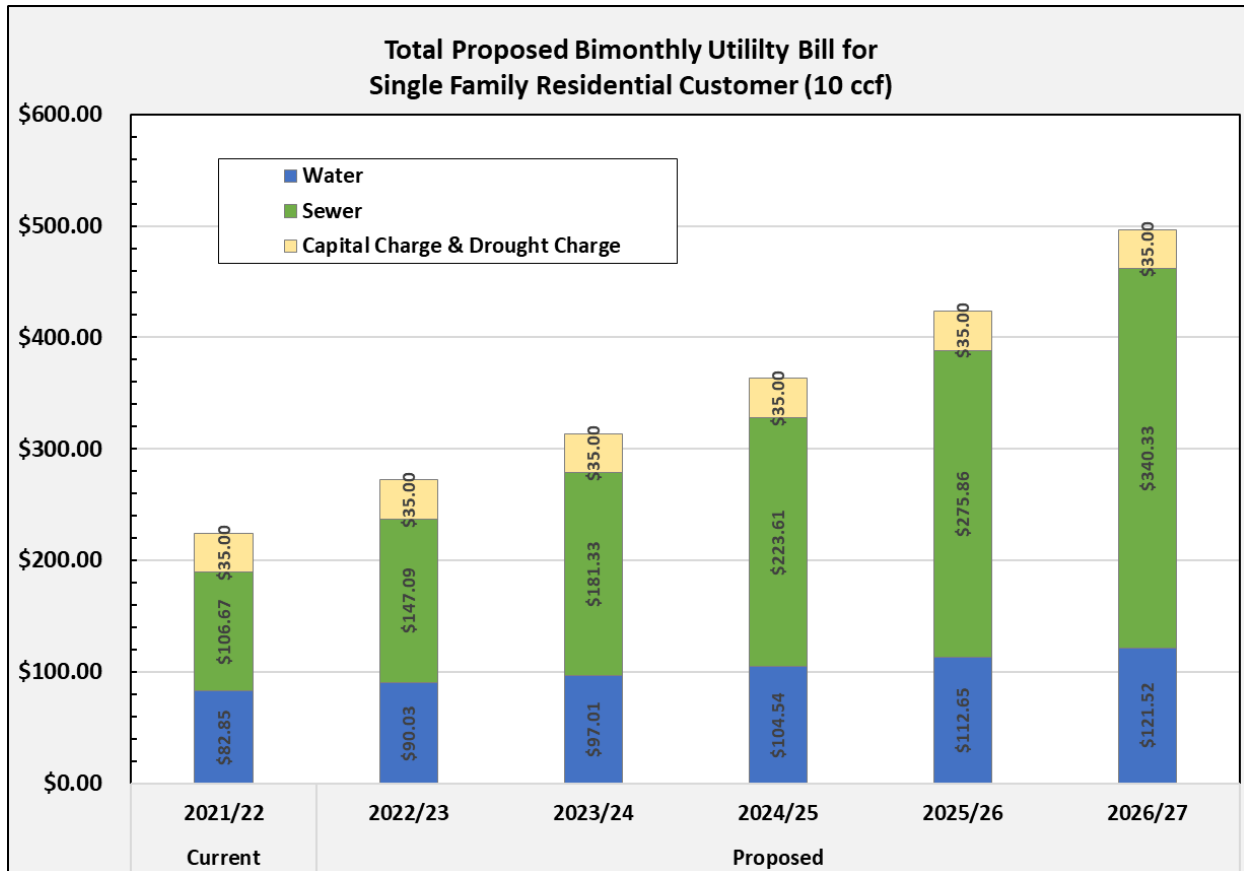
Table 57 includes a sample of residential bill impacts for a combined water and sewer bill based on the proposed rate increases. Combined, the average residential customer who uses 10 ccf bimonthly will see a \$47.60 or 25.1% increase from their current bill. Actual bill impacts will vary based on customer class and consumption per billing period.

**Table 57: Sample Residential Combined Bill Impacts**  
**City of Brisbane**  
**Water and Sewer Utility Rate Study 2022**

|  | Bimonthly Use (ccf) | Current Bill    | Proposed        |                 |                 |                 |                 |
|--|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|  |                     |                 | 2023/24         | 2024/25         | 2025/26         | 2026/27         | 2027/28         |
| <b>Residential: 5/8" meter, 4 ccf</b>  |                     |                 |                 |                 |                 |                 |                 |
| Water Bill                             | 4                   | \$37.47         | \$52.24         | \$56.45         | \$61.00         | \$65.92         | \$71.36         |
| Sewer Bill                             | 4                   | <u>\$80.11</u>  | <u>\$97.36</u>  | <u>\$120.45</u> | <u>\$149.04</u> | <u>\$184.47</u> | <u>\$228.33</u> |
| Total Utility Bill                     |                     | \$117.58        | \$149.60        | \$176.90        | \$210.03        | \$250.39        | \$299.69        |
| \$ Change                              |                     |                 | \$32.02         | \$27.30         | \$33.14         | \$40.35         | \$49.30         |
| % Change                               |                     |                 | 27.2%           | 18.2%           | 18.7%           | 19.2%           | 19.7%           |
| <b>Residential: 5/8" meter, 10 ccf</b> |                     |                 |                 |                 |                 |                 |                 |
| Water Bill                             | 10                  | \$82.85         | \$90.03         | \$97.01         | \$104.54        | \$112.65        | \$121.52        |
| Sewer Bill                             | 10                  | <u>\$106.67</u> | <u>\$147.09</u> | <u>\$181.33</u> | <u>\$223.61</u> | <u>\$275.86</u> | <u>\$340.33</u> |
| Total Utility Bill                     |                     | \$189.52        | \$237.12        | \$278.34        | \$328.15        | \$388.52        | \$461.85        |
| \$ Change                              |                     |                 | \$47.60         | \$41.22         | \$49.81         | \$60.37         | \$73.33         |
| % Change                               |                     |                 | 25.1%           | 17.4%           | 17.9%           | 18.4%           | 18.9%           |
| <b>Residential: 5/8" meter, 20 ccf</b> |                     |                 |                 |                 |                 |                 |                 |
| Water Bill                             | 20                  | \$193.35        | \$216.53        | \$231.68        | \$247.92        | \$265.30        | \$284.01        |
| Sewer Bill                             | 20                  | <u>\$183.27</u> | <u>\$229.98</u> | <u>\$282.80</u> | <u>\$347.90</u> | <u>\$428.18</u> | <u>\$527.00</u> |
| Total Utility Bill                     |                     | \$376.62        | \$446.51        | \$514.47        | \$595.81        | \$693.49        | \$811.01        |
| \$ Change                              |                     |                 | \$69.89         | \$67.97         | \$81.34         | \$97.68         | \$117.52        |
| % Change                               |                     |                 | 18.6%           | 15.2%           | 15.8%           | 16.4%           | 16.9%           |

Figure 11 below shows the total bimonthly utility bill for the next five years, including Water, Sewer, Capital Project, and Drought Charges for a typical residential customer using 10 ccf per 2-month billing period. The current combined bill is \$224.52. With the proposed rate increases, the combined bill is projected to increase to \$496.85 by 2026/27.

**Figure 11: Bimonthly Combined Utility Bill  
City of Brisbane  
Water Utility Rate Study 2022**





# **APPENDIX A: SEWER TABLES**

## Appendix 1: Sewer Variable Unit Rate Derivation

### 2023/24

|                                       |                   |                  |                  |
|---------------------------------------|-------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                   |                  |                  |
| FY2023/24 Revenue Requirement (1)     |                   | \$2,500,000      |                  |
| Variable Charge Recovery %            |                   | 70%              |                  |
| Variable Charge Recovery \$           |                   | \$1,750,000      |                  |
| <b>Allocation to Flow, BOD, SS</b>    |                   |                  |                  |
|                                       | <u>Flow</u>       | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%               | 25%              | 25%              |
| Cost Allocation \$                    | \$875,000         | \$438,000        | \$438,000        |
| Total Annual Loadings (2)             | 181,000           | 261,000          | 261,000          |
| Units                                 | ccf               | lbs              | lbs              |
| Unit Cost                             | \$4.83<br>per ccf | \$1.68<br>per lb | \$1.68<br>per lb |

1 - Table 34, Line 10

2 - Table 38

3 - Table 39

### 2024/25

|                                       |                   |                  |                  |
|---------------------------------------|-------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                   |                  |                  |
| FY2024/25 Revenue Requirement (1)     |                   | \$3,125,000      |                  |
| Variable Charge Recovery %            |                   | 70%              |                  |
| Variable Charge Recovery \$           |                   | \$2,187,500      |                  |
| <b>Allocation to Flow, BOD, SS</b>    |                   |                  |                  |
|                                       | <u>Flow</u>       | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%               | 25%              | 25%              |
| Cost Allocation \$                    | \$1,094,000       | \$547,000        | \$547,000        |
| Total Annual Loadings (2)             | 185,000           | 266,000          | 266,000          |
| Units                                 | ccf               | lbs              | lbs              |
| Unit Cost                             | \$5.91<br>per ccf | \$2.06<br>per lb | \$2.06<br>per lb |

**2025/26**

|                                       |                   |                  |                  |
|---------------------------------------|-------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                   |                  |                  |
| FY2025/26 Revenue Requirement (1)     |                   | \$3,906,000      |                  |
| Variable Charge Recovery %            |                   | 70%              |                  |
| Variable Charge Recovery \$           |                   | \$2,734,200      |                  |
| <b>Allocation to Flow, BOD, SS</b>    |                   |                  |                  |
|                                       | <u>Flow</u>       | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%               | 25%              | 25%              |
| Cost Allocation \$                    | \$1,367,000       | \$684,000        | \$684,000        |
| Total Annual Loadings (2)             | 189,000           | 271,000          | 271,000          |
| Units                                 | ccf               | lbs              | lbs              |
| Unit Cost                             | \$7.23<br>per ccf | \$2.52<br>per lb | \$2.52<br>per lb |

**2026/27**

|                                       |                   |                  |                  |
|---------------------------------------|-------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                   |                  |                  |
| FY2026/27 Revenue Requirement (1)     |                   | \$4,883,000      |                  |
| Variable Charge Recovery %            |                   | 70%              |                  |
| Variable Charge Recovery \$           |                   | \$3,418,100      |                  |
| <b>Allocation to Flow, BOD, SS</b>    |                   |                  |                  |
|                                       | <u>Flow</u>       | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%               | 25%              | 25%              |
| Cost Allocation \$                    | \$1,709,000       | \$855,000        | \$855,000        |
| Total Annual Loadings (2)             | 193,000           | 276,000          | 276,000          |
| Units                                 | ccf               | lbs              | lbs              |
| Unit Cost                             | \$8.85<br>per ccf | \$3.10<br>per lb | \$3.10<br>per lb |

**2027/28**

|                                       |                    |                  |                  |
|---------------------------------------|--------------------|------------------|------------------|
| <b>Allocation to Variable Charges</b> |                    |                  |                  |
| FY2027/28 Revenue Requirement (1)     |                    | \$6,104,000      |                  |
| Variable Charge Recovery %            |                    | 70%              |                  |
| Variable Charge Recovery \$           |                    | \$4,272,800      |                  |
| <b>Allocation to Flow, BOD, SS</b>    | <u>Flow</u>        | <u>BOD</u>       | <u>SS</u>        |
| Cost Allocation %                     | 50%                | 25%              | 25%              |
| Cost Allocation \$                    | \$2,136,000        | \$1,068,000      | \$1,068,000      |
| Total Annual Loadings (2)             | 197,000            | 281,000          | 281,000          |
| Units                                 | ccf                | lbs              | lbs              |
| Unit Cost                             | \$10.84<br>per ccf | \$3.80<br>per lb | \$3.80<br>per lb |

## Appendix 2: Volume Rate by Customer Class

### 2023/24

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) (1) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-----------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                              | BOD    | SS     |                             |
|                     |                            |     | \$4.83                            | \$1.68 | \$1.68 |                             |
| Residential         | 165                        | 165 | \$4.83                            | \$1.73 | \$1.73 | \$8.29                      |
| Standard Commercial | 200                        | 200 | \$4.83                            | \$2.09 | \$2.09 | \$9.02                      |
| Medium Commercial   | 300                        | 300 | \$4.83                            | \$3.14 | \$3.14 | \$11.12                     |
| Heavy Commercial    | 400                        | 400 | \$4.83                            | \$4.19 | \$4.19 | \$13.21                     |

### 2024/25

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                          | BOD    | SS     |                             |
|                     |                            |     | \$5.91                        | \$2.06 | \$2.06 |                             |
| Residential         | 165                        | 165 | \$5.91                        | \$2.12 | \$2.12 | \$10.15                     |
| Standard Commercial | 200                        | 200 | \$5.91                        | \$2.57 | \$2.57 | \$11.04                     |
| Medium Commercial   | 300                        | 300 | \$5.91                        | \$3.85 | \$3.85 | \$13.61                     |
| Heavy Commercial    | 400                        | 400 | \$5.91                        | \$5.13 | \$5.13 | \$16.18                     |

### 2025/26

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                          | BOD    | SS     |                             |
|                     |                            |     | \$7.23                        | \$2.52 | \$2.52 |                             |
| Residential         | 165                        | 165 | \$7.23                        | \$2.60 | \$2.60 | \$12.43                     |
| Standard Commercial | 200                        | 200 | \$7.23                        | \$3.15 | \$3.15 | \$13.53                     |
| Medium Commercial   | 300                        | 300 | \$7.23                        | \$4.72 | \$4.72 | \$16.68                     |
| Heavy Commercial    | 400                        | 400 | \$7.23                        | \$6.30 | \$6.30 | \$19.83                     |

### 2026/27

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                          | BOD    | SS     |                             |
|                     |                            |     | \$8.85                        | \$3.10 | \$3.10 |                             |
| Residential         | 165                        | 165 | \$8.85                        | \$3.19 | \$3.19 | \$15.23                     |
| Standard Commercial | 200                        | 200 | \$8.85                        | \$3.87 | \$3.87 | \$16.59                     |
| Medium Commercial   | 300                        | 300 | \$8.85                        | \$5.80 | \$5.80 | \$20.45                     |
| Heavy Commercial    | 400                        | 400 | \$8.85                        | \$7.73 | \$7.73 | \$24.32                     |

### 2027/28

| Customer Class      | Wastewater Strength (mg/l) |     | Unit Rates (\$ per ccf or lb) |        |        | Total Variable Rate per ccf |
|---------------------|----------------------------|-----|-------------------------------|--------|--------|-----------------------------|
|                     | BOD                        | SS  | Flow                          | BOD    | SS     |                             |
|                     |                            |     | \$10.84                       | \$3.80 | \$3.80 |                             |
| Residential         | 165                        | 165 | \$10.84                       | \$3.91 | \$3.91 | \$18.67                     |
| Standard Commercial | 200                        | 200 | \$10.84                       | \$4.74 | \$4.74 | \$20.33                     |
| Medium Commercial   | 300                        | 300 | \$10.84                       | \$7.11 | \$7.11 | \$25.07                     |
| Heavy Commercial    | 400                        | 400 | \$10.84                       | \$9.48 | \$9.48 | \$29.81                     |

1 - Table 12



## **City of Brisbane's Frequently Asked Questions (FAQs) for the Water and Wastewater Rate Study**

### **1. Why is the City of Brisbane (City) proposing to adjust the water and sewer rates?**

The City's water and sewer rates are proposed to be adjusted to cover the increasing cost of service, simplify the existing rate structures, and better promote equity among customers. Additionally, rate increases are needed so that the City's Utility Fund can retain a positive credit rating by servicing existing debt financing and putting the City in a position to consider financing new capital projects. The City also delayed implementing any rate increases during the COVID-19 pandemic.

The proposed water rate increases are needed to pay for the cost of water purchases, operational costs, and ongoing maintenance and repairs of aging water mains and other infrastructure (see #11 below regarding the Capital Projects Charge). The last water rate study was conducted in 2001, and the last water operational rate increase went into effect in 2012. Since then, the cost to purchase water from the SFPUC has increased by 94%. Water purchases account for over 50% of water utility operating costs, and the City has no control over these costs.

The proposed sewer rate increases are needed to cover sewage treatment and disposal costs passed through from the City of San Francisco, operational costs, and ongoing maintenance and repairs of the collection system and sewer mains (see #11 below regarding the Capital Projects Charge). Current sewer rate revenues are insufficient to fund the costs of operating the sewer system. The last sewer rate study was conducted in 2001, and the last sewer operational rate increase went into effect in 2012. Since then, treatment charges from the City of San Francisco have doubled. Roughly 58% of total sewer operating expenses is comprised of treatment charges, and the City has no control over these costs.

### **2. What is Proposition 218 and what are the procedures under Proposition 218?**

Adopted by the voters in November 1996, Proposition 218 added Article XIID to the State Constitution and governs the process for property-related fee increases. Proposition 218 gives taxpayers the right to vote on all local taxes and requires taxpayer approval of property-related assessments and fees, including water, sewer, and solid waste rates. Under Section 6 of Article XIID, a notice must be sent to all property owners and customers at least *45 days* before a public hearing is held to consider proposed rate increases. Under Proposition 218, persons objecting to the rate increase must file a protest with the City. Protests concerning the rate increase must be in writing, and may be delivered in person, or sent by mail, to the City of Brisbane City Clerk, 50 Park Place, Brisbane, CA 94005. In person protests may also be delivered at the public hearing on April 6, 2023 but all written protests, whether delivered in person or sent by mail, must be received by the City before the close of the public hearing on April 6. At the public hearing, an oral protest, without an accompanying written protest, will not count as a valid protest. No protests will



be accepted if sent via email, text, fax, or other electronic means. If there is no majority protest, the proposed rates may be adopted. There may be only one written protest for each parcel affected by the rate increase.

### **3. What is a water/sewer utility rate study?**

A rate study is a financial review that projects future revenues and expenses typically over a 5 or 10-year period. The objective of a rate study is to determine whether revenues are sufficient to cover a utility's operating, maintenance, and capital expenses, as well as to pay for debt service and reserve funds. Rate studies provide transparency into what the City can expect in future years to ensure that each utility has the financial resources to meet its cost of providing service. Rate studies are typically performed every 3 to 5 years.

### **4. What costs are recovered from the water and sewer rates?**

Water and sewer rates are the primary source of revenue used to pay for the operating expenses of each system. Operating expenses include, but are not limited to, staffing, administration, utilities, equipment, wholesale water purchases, sewer treatment costs, and the repair and maintenance of the aging infrastructure. The City is also responsible for costs related to long-term financial management, including maintaining adequate fund reserves. The City's Utility operating reserve target is to maintain a reserve no less than 25% of annual operating costs.

### **5. Can revenues from water and sewer rates be used for other projects?**

Revenues from water rates can only be used for water expenses, and similarly, revenues from sewer rates can only be used to pay for sewer expenses. The City does not profit from rates paid by customers and can only charge rates equivalent to the cost of providing services. The water and sewer utilities are enterprise funds which means they are self-supported from water and sewer rates and charges. Enterprise funds are separate from the General Fund and do not receive any general tax revenue.

### **6. Why are the water and sewer rates being increased now?**

The operational water and sewer rates have not increased in over 10 years. In the past, the City relied on impact fees paid by new development to supplement rate revenues. However, growth has slowed down which has resulted in a decrease in water and sewer impact fee revenues.

The City began the rate study process in 2021, but delayed a decision on implementing any rate increases during the COVID pandemic. The Utility Fund is now facing operating deficits as water and sewer expenses continue to increase. Since 2012, the cost for the City to purchase water has increased by 94%. Water purchases account for over 50% of water utility operating costs, and the City has no control over these costs. Moreover, the cost for sewer treatment has more than doubled since 2013. Roughly 58% of total sewer operating expenses is comprised of treatment charges, and the City has no control over these costs.



## **7. Why is the water rate structure changing?**

The current water rate structure is comprised of two components: 1) a Fixed Charge (Water Service) and 2) a Consumption Charge (Water Use) based on metered water consumption. The current water rate structure was developed in 2000 and levies different rates based on meter size and customer class. After a review of the water system costs, the City is proposing to simplify the water rate structure and better promote equity among customers by implementing a single water rate structure that applies to all customer classes (residential, commercial, and irrigation).

The proposed water rate structure includes a single Fixed Charge rate schedule for all customers. For the Consumption Charges, all customers will be charged according to a two-tiered rate structure. In addition, all customers will receive one unit (1 ccf) of water with their Fixed Charge.

## **8. Why is the sewer rate structure changing?**

The City's current sewer rate structure was developed in 2000 and includes two components: – 1) a Flat Charge, assigned to cover fixed costs associated with maintaining the ability or readiness to serve each connection, and 2) a Variable Charge. The Variable Charge is based on "flow strength." For example, sewage flow strength from a residential customer differs from the flow strength of a commercial customer. Because sewer flow is not metered, water usage is used as an estimate for sewer flow. For residential customers, sewer flow is approximated using winter water consumption for the four-month period between October and January when water usage is at the lowest -- the calculated winter average goes into effect the April after the previous winter. The Variable Charge for commercial customers is billed based on actual monthly consumption.

The proposed sewer rate structure maintains the Flat Charge but eliminates the current tiered Variable Charges. (Tiered rates are typically utilized for water rates to encourage conservation and are less relevant to sewer flow.) Because the proposed Variable Charge will be a single tier that varies based on flow strength, the modification better aligns the sewer rate structure with the cost of providing service for each customer class.

## **9. When would the proposed rate adjustments take effect?**

If approved, the first rate change would take effect on June 15, 2023, with subsequent increases each June 15 through 2027. The June 15th start date will be reflected on the bill issued in late August, with a due date in October. If the rate plan is approved, the City will review its rates and revenues each year. The City can set rates at or below the maximum adopted in the rate plan. If the maximum rate is not needed due to higher than expected revenues or lower than expected costs, the City Council can implement a lower rate than described in the rate plan.





## **10. What if rate increases are not approved?**

If rates are not increased, the City will not be able to afford to provide the same level of reliable water and sewer services. The Utility Fund is anticipated to operate at a deficit this fiscal year, meaning that it will need to use reserves to cover costs. Additionally, it will not have sufficient operating revenues to meet its debt coverage requirement. In 2015, the City issued \$8.3 million in utility revenue bonds to finance capital projects. The bond documents require the City to maintain sufficient annual net revenues in its Utility Fund to be at least 1.25 times the annual debt service. The City believes the proposed new rate structure will satisfy the debt service requirement by 2024/2025 and the operating reserve target by 2027/2028. Failure to meet debt service coverage may hinder the City's ability to qualify for future bond funding.

## **11. What is the Capital Projects Charge?**

The Capital Projects Charge is a separate charge to pay for capital projects by repaying bonds that are funding the projects. Because we have not increased rates, we have not been able to issue bonds for current necessary improvements. The bond issuance schedule will be delayed until our annual revenues can cover corresponding annual operating expenses.

In April of 2014, the City Council approved the first Capital Project Charge to pay for infrastructure projects for the water and sewer systems. The plan was to create a 20-year capital project plan paid for by the Capital Project Charge in which the charge will be increased every 5 years between 2015 and 2035. In October of 2022, the City Council voted to implement the second of four Capital Projects Charges to pay for \$10 million in needed improvements to the City's aging water and wastewater systems. Projects include an Advanced Metering Infrastructure (AMI) system, the Glen Park Pump Station upgrade, and ongoing water and sewer pipeline replacements.

The Capital Project Charge is levied according to a tiered rate system based on springtime usage (mid-February through mid-June) to ensure that lower water users pay less than higher users. Total Capital Project Charge revenue is evenly split between the water and sewer funds. The Capital Project Charge is distinct from water and sewer rates and was not analyzed in the 2022 *Water and Sewer Utility Rate Study*.

## **12. What is the Drought Contingency Charge?**

Approved by the City in 2018, the Drought Contingency Charge is a separate charge to fund a drought reserve fund with the objective of avoiding having to raise rates in times of severe water shortages. In turn, the drought reserve would be used to cover any lost revenues. During droughts, the City experiences a decrease in rate revenues related to consumption due to customers conserving water. Yet, the costs to maintain the water system remain the same and can even increase. The City anticipates that the Drought Reserve will be fully funded by 2025 if a drought does not occur. The Drought Contingency Charge is distinct from water and sewer rates and was not analyzed in the 2022 *Water and Sewer Utility Rate Study*.



**13. Does the City have a low-income discount?**

The City offers a Low Income Rate Assistance program, or LIRA, for utility bill customers who are enrolled in PG&E’s Care Discount Program. The City is proposing to increase the low income discount so that qualifying customers will receive a 25% discount off their total monthly utility bill. Additional information is provided on the City’s website at [brisbaneca.org/utility-billing](http://brisbaneca.org/utility-billing) or by calling (415) 508-2154.

**14. Does the State offer any discounts for utility bill customers?**

Yes! The Department of Community Services and Development (CSD) just announced on March 14, 2023 that utilities participating in the Low Income Household Water Assistance Program (LIHWAP) -- which the City of Brisbane does -- have raised the maximum benefit for LIHWAP Arrearage Assistance from \$2,000 to \$15,000. Local Service Providers (LSPs) can now approve applications for assistance with past-due bills that exceed \$2,000. Learn more at [csd.ca.gov/waterbill](http://csd.ca.gov/waterbill)

