
City of Perris
Proposition 218 Engineer's Report
for the Adoption of New Water Rates

Downtown Water System
North Perris Water System

March 30, 2023



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1.0 Purpose and Background

This Engineer's Report (Report) is prepared in accordance with California and Federal law. The purpose of the Report is to provide for, and describe, the recommended additional revenues required by the City of Perris (City) to offset ongoing annual deficits resulting from operation and capital improvement expenses. The Report also identifies the water rate increases required within the City's Downtown Water System (DWS) and North Perris Water System (NPWS) to reduce the annual deficits and allow the City to "breakeven" over the next five (5) years. This Report was prepared in compliance with Proposition 218 (enacted in 1996 and reflected in the California Constitution as Article XIII D) to ensure that water rates and fees are reasonable and proportional to the cost of providing service.

Stetson Engineers Inc. (Stetson) was authorized by the City to prepare this Report in compliance with Proposition 218 for the City's two water systems: (1) the DWS and (2) the NPWS. The purpose of the Report is to determine the water rates necessary to address ongoing annual net cost deficits and required capital improvements in both water systems. The Report recommends rate adjustments for the City to consider in order to address annual net cost deficits and planned water system capital improvements. In addition, water rates of other local water agencies are provided for comparison.

The City's finance department staff provided recent information on annual revenues from water sales and expenses associated with the operations of the DWS and NPWS.

The Report identifies potential water rate adjustments that the City may need to consider. The potential water rate increases provided are based upon annual "revenues versus costs" to breakeven. Where it was determined the City would be operating in a deficit; recommended approaches are provided for rate increases necessary to operate in a "breakeven" situation.

2.0 Description of Water Systems

The City is located in western Riverside County, approximately 60 miles southeasterly of the City of Los Angeles, as shown on Figure 1. The City covers an area of approximately 31.5 square miles. The DWS is located within the central portion of the City and covers an area of approximately 2.9 square miles. The NPWS is located within the northeasterly portion of the City and covers an area of approximately 0.4 square miles. The NPWS is physically separate from the DWS.

The City currently provides water service to approximately 2,666 customers (service connections) in the DWS and approximately 1,458 customers in the NPWS, for an overall total of approximately 4,124 customers. The majority (approximately 78.5 percent) of all the meters are ¾-inch residential meters. Table 1 summarizes the sizes and quantities of water meters for the DWS and NPWS.

Table 1. Summary of Existing Accounts

| Meter Size | DWS | NPWS | Total |
|--------------|-------|-------|-------|
| ¾" | 1,804 | 1,434 | 3,238 |
| 1" or 1-1/4" | 148 | 6 | 154 |
| 1-1/2" | 65 | 1 | 66 |
| 2" | 83 | 13 | 96 |
| 3" | 17 | 3 | 20 |
| 4" | 14 | 1 | 15 |
| 6" | 2 | 0 | 2 |
| Other | 533 | 0 | 533 |
| Total | 2,666 | 1,458 | 4,124 |

Source: Data provided by the City's Finance Department

Figure 1. Vicinity Map

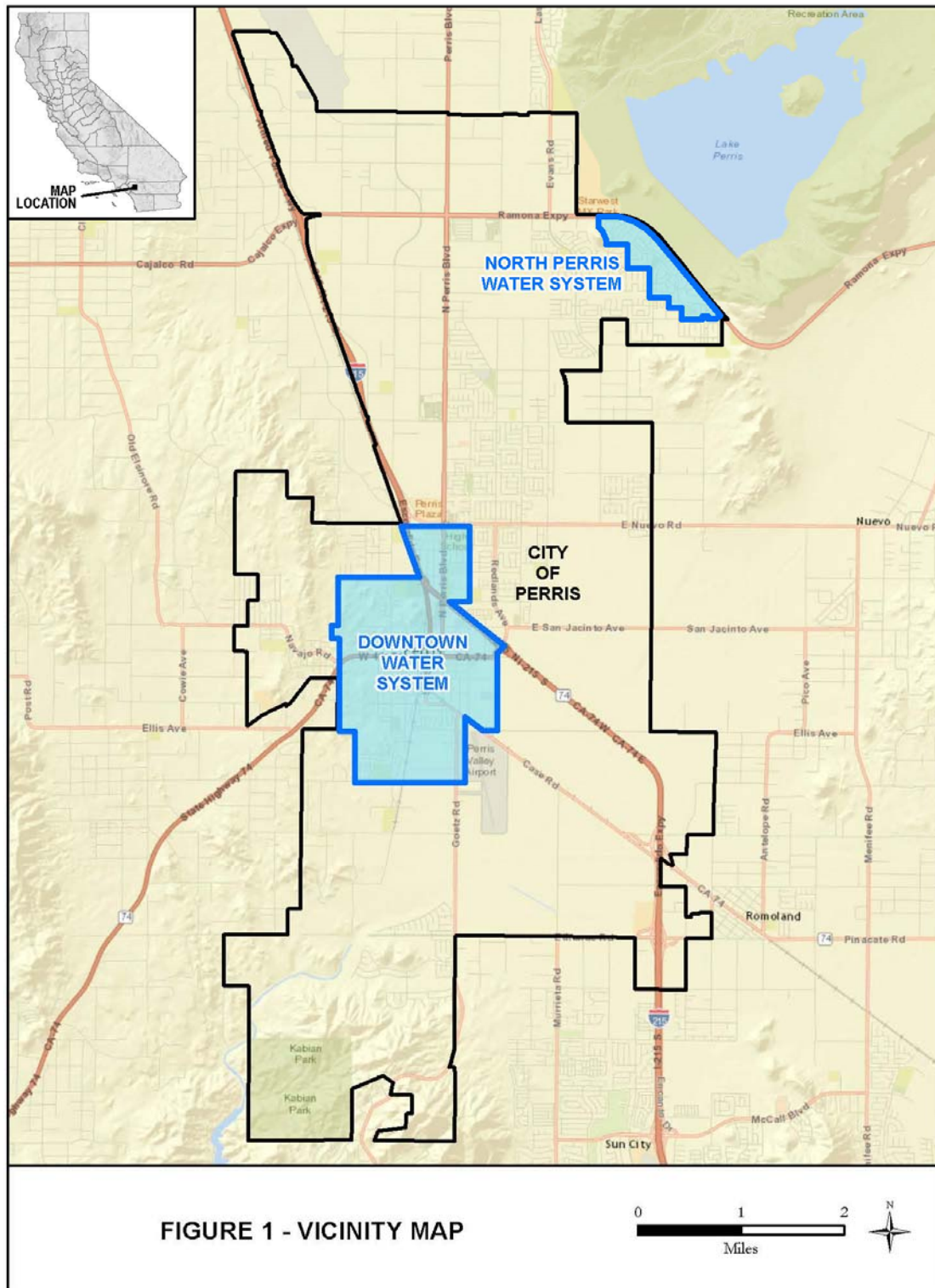


FIGURE 1 - VICINITY MAP

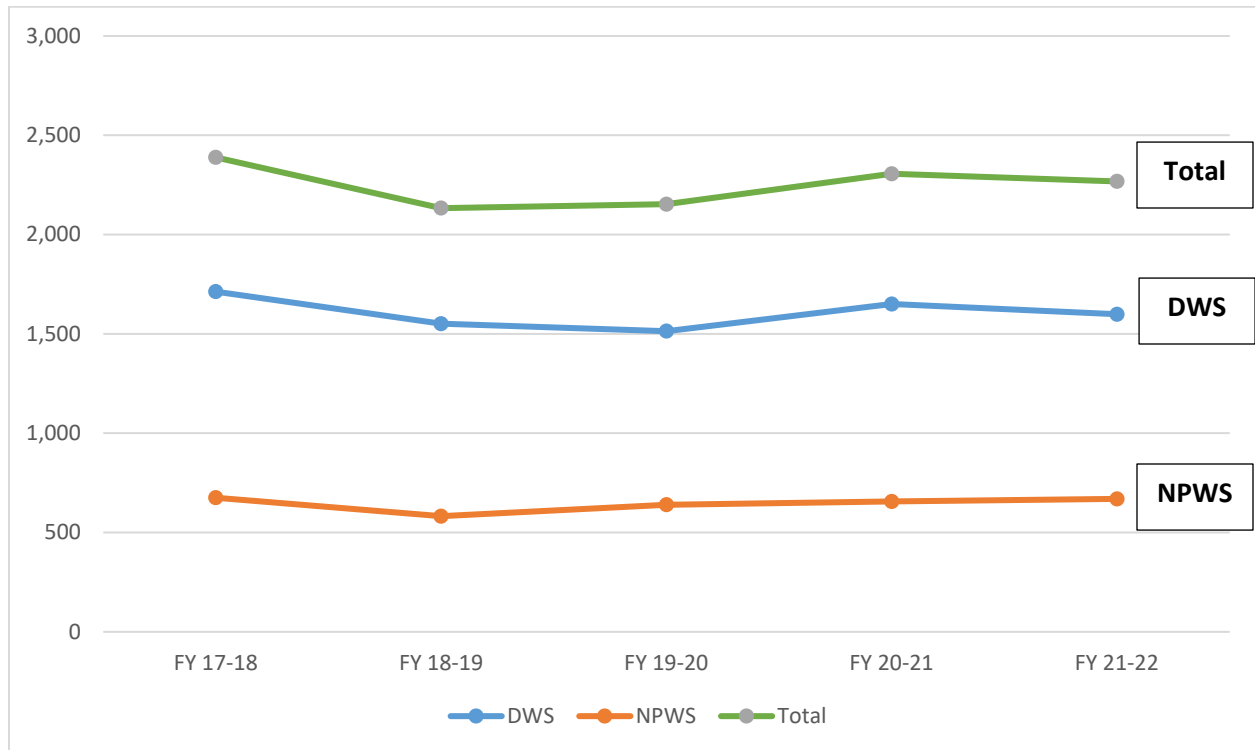
The DWS receives all of its domestic water supply from water purchased from Eastern Municipal Water District (EMWD) through five (5) service connections. The NPWS produces domestic water supply from the City’s wells but can also purchase water from EMWD through one (1) emergency service connection. Over the past five years, the DWS has sold between 1,513 acre-feet per year (AFY) to 1,713 AFY to its customers, and the NPWS has sold between 582 AFY to 675 AFY to its customers. Table 2 and Figure 2 present historical water sales for DWS, NPWS, and both systems combined from Fiscal Year (FY) 2017-18 through FY 2021-22. While historical water sales over these five years have varied some from year to year, the overall trend is flat, therefore, future consumption rates can be projected to remain flat or equivalent to the recent historical five-year average.

Table 2. Summary of Water Sales

| System | Units | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | 5-Year Average |
|---------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------------|
| DWS | HCF | 746,158 | 675,577 | 659,252 | 718,733 | 696,382 | 699,220 |
| | AF | 1,713 | 1,551 | 1,513 | 1,650 | 1,599 | 1,605 |
| NPWS | HCF | 294,168 | 253,514 | 278,554 | 285,636 | 291,309 | 280,636 |
| | AF | 675 | 582 | 639 | 656 | 669 | 644 |
| Total | HCF | 1,040,326 | 929,091 | 937,806 | 1,004,369 | 987,691 | 979,857 |
| | AF | 2,388 | 2,133 | 2,153 | 2,306 | 2,267 | 2,249 |

Source: Data provided by the City's Finance Department

Figure 2. Summary of Water Consumption (AFY)



3.0 Summary of Historical Water System Expenses and Revenues

Historical revenue and expense amounts over the past five years (from FY 2017-18 through FY 2021-22) were provided by City staff. Five years of historic data were reviewed, and calculated average annual expenses and revenues were determined, as shown on Tables 3 and 4, respectively. The City’s expenses primarily include administrative, water purchases from EMWD, contract services, professional services, legal services, interest payments, and depreciation costs. The City’s revenues are primarily based on “monthly service charges” and “water consumption charge”. The monthly service charge is based on the size of the meter at the customer’s property. The water consumption charge is calculated based on actual water usage by each customer and multiplied by the unit cost of water. Some occasional expenses and credits accounted for under “Water Fund” and “Capital Grants/Contingencies” were omitted from the summary of expenses since they were not expected to reoccur in the future.

Table 3. Summary of Historical Expenses

| | HISTORICAL EXPENSES [1] | | | | | |
|----------------------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY17-18 | FY18-19 | FY19-20 | FY20-21 | FY21-22 | 5-Year Average |
| Downtown Water System | | | | | | |
| Administrative | \$207,951 | \$185,255 | \$218,661 | \$205,748 | \$160,798 | \$195,683 |
| Contract Services | \$434,208 | \$518,528 | \$565,204 | \$495,846 | \$617,703 | \$526,298 |
| Professional Services | \$419,944 | \$7,358 | \$16,932 | \$23,047 | \$9,511 | \$95,358 |
| Water Purchase from EMWD | \$2,195,075 | \$2,233,095 | \$2,044,231 | \$2,326,171 | \$2,418,681 | \$2,243,451 |
| Depreciation | \$159,210 | \$159,211 | \$164,387 | \$168,496 | \$195,822 | \$169,425 |
| Other | \$70,084 | \$42,960 | \$35,894 | \$40,734 | \$64,234 | \$50,781 |
| Subtotal (DWS) | \$3,486,473 | \$3,146,407 | \$3,045,308 | \$3,260,041 | \$3,466,749 | \$3,280,996 |
| North Perris Water System | | | | | | |
| Administrative | \$182,287 | \$162,136 | \$158,639 | \$161,366 | \$139,017 | \$160,689 |
| Contract Services | \$308,151 | \$273,625 | \$288,347 | \$308,585 | \$414,870 | \$318,716 |
| Legal Services | \$69,417 | \$33,520 | \$15,137 | \$20,856 | \$25,474 | \$32,881 |
| Depreciation | \$320,359 | \$320,359 | \$320,359 | \$320,359 | \$320,359 | \$320,359 |
| Interest Payments | \$317,500 | \$305,741 | \$293,982 | \$282,222 | \$0 | \$239,889 |
| Other | \$16,688 | \$16,540 | \$29,297 | \$32,570 | \$23,313 | \$23,681 |
| Subtotal (NPWS) | \$1,214,402 | \$1,111,921 | \$1,105,760 | \$1,125,959 | \$923,034 | \$1,096,215 |
| Total (DWS and NPWS) | | | | | | |
| Administrative | \$390,238 | \$347,391 | \$377,300 | \$367,114 | \$299,815 | \$356,372 |
| Contract Services | \$742,359 | \$792,153 | \$853,551 | \$804,431 | \$1,032,573 | \$845,013 |
| Professional Services | \$419,944 | \$7,358 | \$16,932 | \$23,047 | \$9,511 | \$95,358 |
| Water Purchase from EMWD | \$2,195,075 | \$2,233,095 | \$2,044,231 | \$2,326,171 | \$2,418,681 | \$2,243,451 |
| Legal Services | \$69,417 | \$33,520 | \$15,137 | \$20,856 | \$25,474 | \$32,881 |
| Depreciation | \$479,569 | \$479,570 | \$484,746 | \$488,855 | \$516,181 | \$489,784 |
| Interest Payments | \$317,500 | \$305,741 | \$293,982 | \$282,222 | \$0 | \$239,889 |
| Other | \$86,772 | \$59,501 | \$65,191 | \$73,303 | \$87,547 | \$74,463 |
| Expenses (Total) | \$4,700,875 | \$4,258,328 | \$4,151,069 | \$4,386,000 | \$4,389,783 | \$4,377,211 |

Notes:

[1] Historical expenses based on records provided by the City. Historical expenses shown do not include expenses from the City’s Water Fund and Capital Grants/Contingencies records. These expenses, which include post-employment benefit adjustments and infrastructure capital assets contributed by developers to the City, are typically one-time transactions that may not reoccur in the future.

Table 4. Summary of Historical Revenues

| | HISTORICAL REVENUES [1] | | | | | |
|----------------------------------|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | 5-Year Average |
| Downtown Water System | | | | | | |
| Consumption (HCF) | 746,158 | 675,577 | 659,252 | 718,733 | 696,382 | 699,220 |
| Service Charge | \$560,008 | \$550,583 | \$551,962 | \$551,039 | \$559,847 | \$554,688 |
| Consumption Charge | \$2,210,690 | \$1,943,454 | \$1,948,208 | \$2,159,891 | \$2,103,803 | \$2,073,209 |
| Other | \$48,813 | \$64,130 | \$52,571 | \$31,408 | \$14,182 | \$42,221 |
| Subtotal (DWS) | \$2,819,511 | \$2,558,167 | \$2,552,741 | \$2,742,338 | \$2,677,832 | \$2,670,118 |
| North Perris Water System | | | | | | |
| Consumption (HCF) | 294,168 | 253,514 | 278,554 | 285,636 | 291,309 | 280,636 |
| Service Charge | \$233,503 | \$233,503 | \$230,169 | \$217,590 | \$210,229 | \$224,999 |
| Consumption Charge | \$735,420 | \$633,785 | \$696,385 | \$714,090 | \$728,273 | \$701,591 |
| Other | \$18,222 | \$19,597 | \$15,540 | \$130 | \$1,508 | \$10,999 |
| Subtotal (NPWS) | \$987,146 | \$886,885 | \$942,094 | \$931,810 | \$940,010 | \$937,589 |
| Total (DWS and NPWS) | | | | | | |
| Consumption (HCF) | 1,040,326 | 929,091 | 937,806 | 1,004,369 | 987,691 | 979,857 |
| Service Charge | \$793,511 | \$784,087 | \$782,131 | \$768,629 | \$770,077 | \$779,687 |
| Consumption Charge | \$2,946,110 | \$2,577,239 | \$2,644,593 | \$2,873,981 | \$2,832,075 | \$2,774,799 |
| Other | \$67,035 | \$83,727 | \$68,111 | \$31,538 | \$15,689 | \$53,220 |
| Revenues (Total) | \$3,806,656 | \$3,445,052 | \$3,494,835 | \$3,674,148 | \$3,617,841 | \$3,607,707 |
| SUMMARY | | | | | | |
| Expenses (from Table 3) | \$4,700,875 | \$4,258,328 | \$4,151,069 | \$4,386,000 | \$4,389,783 | \$4,377,211 |
| Surplus / (Deficit) | (\$894,219) | (\$813,276) | (\$656,234) | (\$711,852) | (\$771,942) | (\$769,504) |

Notes:

[1] Historical service charges and consumption charges were calculated based on metered consumption data provided by the City. "Other" revenues were based on records provided by the City and include water turn on service, water meter connection, water equity, and water repair fees.

Figure 3 is a graph of historical expenses for the DWS, NPWS, and both systems combined from FY 2017-18 through FY 2021-22. Although historical expenses over these five years have varied from year to year, the overall trend is flat, with the exception of interest payments for NPWS ending in FY 2020-21. As shown in Table 3, the five-year average of the total expenses is approximately \$4.4 million.

Figure 4 is a graph of historical revenues for the DWS, NPWS, and both systems combined for FY17-18 through FY21-22. Historical revenues over these five years also show an overall flat trend. As shown in Table 4, the five-year average of total revenues is approximately \$3.6 million. Table 4 also shows that the five-year average deficit is approximately **(\$770,000)**. In order for annual revenues to break even with annual expenses, revenues would need to be increased. A discussion of the required revenue increase is provided later in this Report.

Figure 3. Graph of Historical Expenses

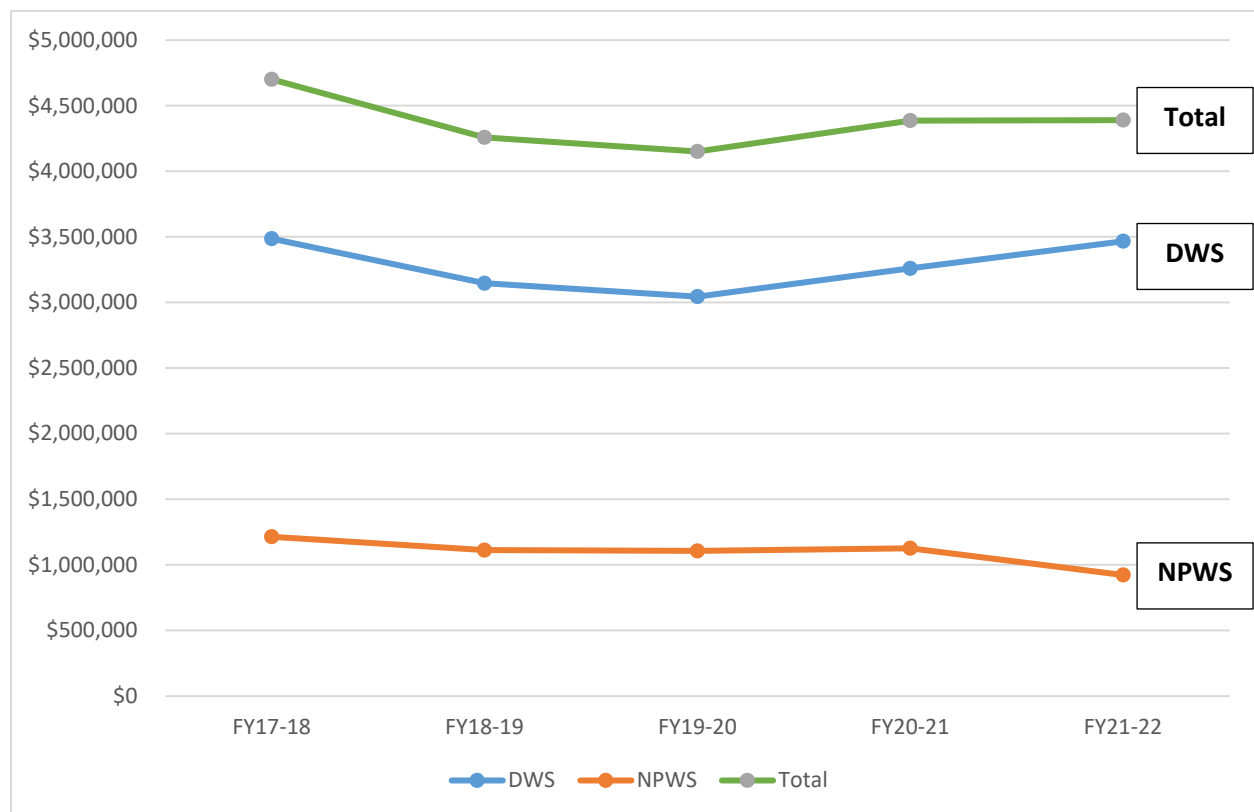
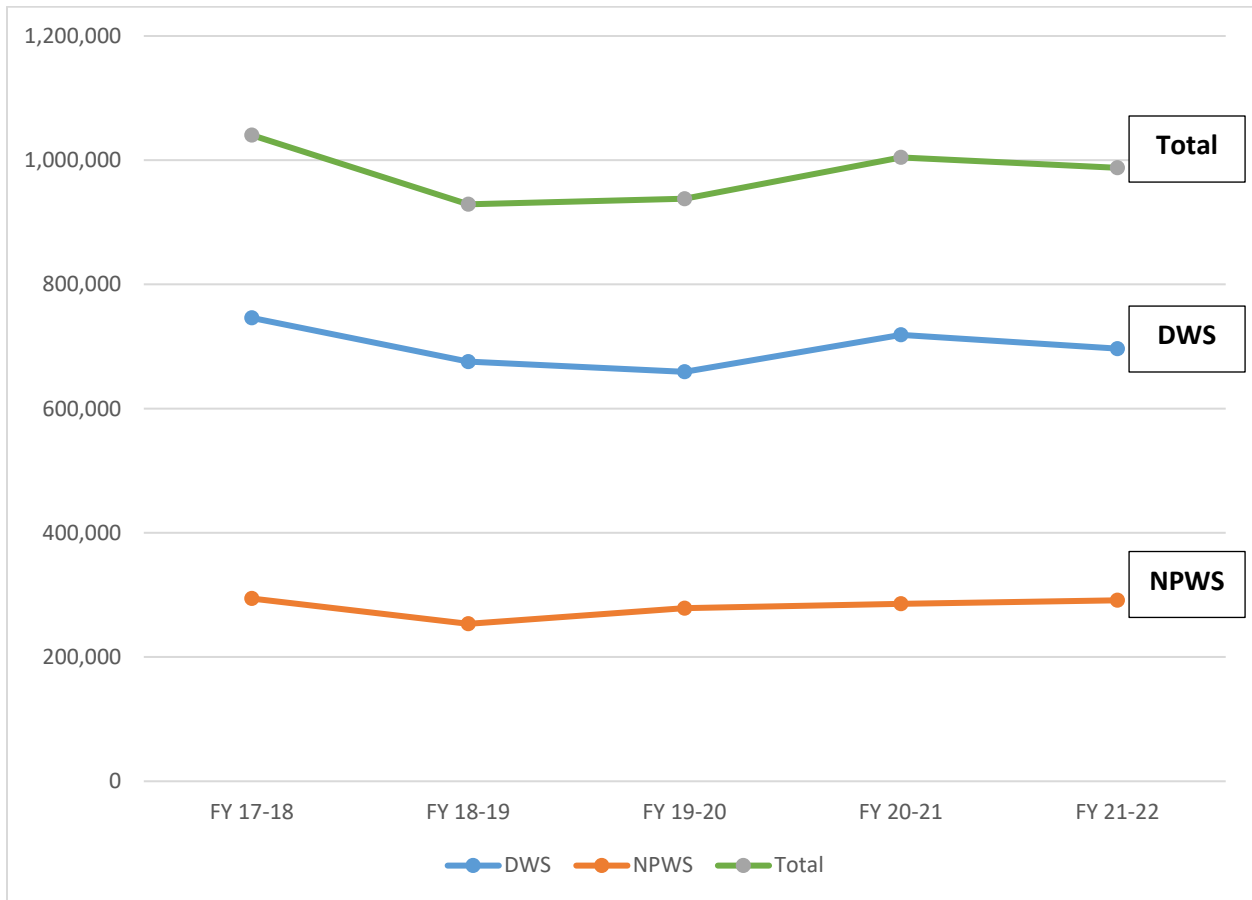


Figure 4. Graph of Historical Revenues



4.0 Capital Improvements

Based on recent condition assessments performed by V&A Consulting Engineers in 2022, rehabilitation and capital repairs of various components of the City’s water systems are needed, including rehabilitation of water storage tanks, pipeline repairs and replacements, and groundwater well rehabilitations, all for increased water supply reliability. Cost estimates for the recommended capital improvements total approximately \$5.8 million as referenced in Table 5. These costs will need to be added to future projected expenses.

Table 5. Recommended Capital Improvement Costs

| System | Component | Cost |
|----------------------------------|---------------------|--------------------|
| Downtown Water System | Tanks | \$2,625,000 |
| | Booster Pumps | \$60,000 |
| | <u>Pipelines</u> | <u>\$500,000</u> |
| | Subtotal | \$3,185,000 |
| North Perris Water System | Tank Site | \$1,955,000 |
| | Wells | \$260,000 |
| | <u>Distribution</u> | <u>\$410,000</u> |
| | Subtotal | \$2,625,000 |
| Total | | \$5,810,000 |

Source:
Costs provided by the City of Perris

5.0 Projected Expenses, Revenues, and Potential Water Rate Increases

The City’s projected expenses associated with the DWS and NPWS are anticipated to increase at a rate similar to the inflation rate. In order to project these future expenses, historical inflation rates were reviewed. Table 6 summarizes national inflation rates for calendar years 2018 through 2022. The 2022 inflation rate of 8.0 percent was applied to the five-year average of expenses (from FY 2017-18 through FY 2021-22) to project the City’s expenses during FY 2022-23. The five-year average inflation rate of 3.6 percent (from calendar years 2018 through 2022) was applied to the subsequent five years to project the City’s expenses from FY 2023-24 through FY 2027-28. A summary of the City’s projected annual operational expenses is provided in Table 7.

Table 6. Historical Inflation Rate

| Calendar Year | Average Inflation (Percent) |
|----------------------|------------------------------------|
| 2018 | 2.4% |
| 2019 | 1.8% |
| 2020 | 1.2% |
| 2021 | 4.7% |
| 2022 | 8.0% |
| Average | 3.6% |

Source:

<https://www.usinflationcalculator.com/inflation/current-inflation-rates/>

The City’s projected capital improvements of \$5.8 million were spread out evenly over a 15-year period (or \$387,000 per year) beginning in FY 2023-24. Capital improvement expenses can be varied annually to reduce the deficit but will also depend on the schedules for any required capital improvements. A summary of the City’s projected capital improvement expenses over the next five years is also provided in Table 7.

A summary of the City’s projected annual revenues, based on existing water rates, is provided in Table 8. A summary of the City’s projected annual revenues, based on the recommended water rate increases, is provided in Table 8. The projected revenues during FY 2022-23 are based on the historical five-year average of revenues (from FY 2017-18 through FY 2021-22). As discussed previously, the City requires additional revenue to offset ongoing annual deficit resulting from its operational expenses. Table 9 projects the City’s annual revenues based on water consumption rates and monthly service charges increased at a rate of 10 percent per year over the next five (5) years, from FY 2023-24 through FY 2027-28. Table 10 provides a summary of projected annual surpluses and/or deficits (based on projected operational and capital improvement expenses from Table 7 less the projected revenues from Tables 8 and 9).

In order to reduce and eventually eliminate the annual deficit, which currently averages **(\$770,000)** per year (from Table 4) and is projected to increase to over **(\$2.1 million)** (from Table 10), water rates will need to be increased. As shown in Table 10, if the City's water consumption rates and monthly service charges are increased at a rate of 10 percent per year over the next five (5) years, from FY 2023-24 through FY 2027-28, the projected deficits will be reduced and will result in a "breakeven" scenario for the City by the 5th year (in FY 2027-28).

Table 7. Summary of Projected Expenses

| | PROJECTED EXPENSES [1] | | | | | |
|--|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY22-23 | FY23-24 | FY24-25 | FY25-26 | FY26-27 | FY27-28 |
| Projected Annual Increase [2] | 8.0% | 3.6% | 3.6% | 3.6% | 3.6% | 3.6% |
| Downtown Water System | | | | | | |
| Administrative | \$212,000 | \$220,000 | \$228,000 | \$237,000 | \$246,000 | \$255,000 |
| Contract Services | \$569,000 | \$590,000 | \$612,000 | \$635,000 | \$658,000 | \$682,000 |
| Professional Services | \$103,000 | \$107,000 | \$111,000 | \$115,000 | \$120,000 | \$125,000 |
| Water Purchase from EMWD | \$2,423,000 | \$2,511,000 | \$2,602,000 | \$2,696,000 | \$2,794,000 | \$2,895,000 |
| Depreciation | \$183,000 | \$190,000 | \$197,000 | \$205,000 | \$213,000 | \$221,000 |
| Other | \$55,000 | \$57,000 | \$60,000 | \$63,000 | \$66,000 | \$69,000 |
| Subtotal (DWS) | \$3,545,000 | \$3,675,000 | \$3,810,000 | \$3,951,000 | \$4,097,000 | \$4,247,000 |
| North Perris Water System | | | | | | |
| Administrative | \$174,000 | \$181,000 | \$188,000 | \$195,000 | \$203,000 | \$211,000 |
| Contract Services | \$345,000 | \$358,000 | \$371,000 | \$385,000 | \$399,000 | \$414,000 |
| Legal Services | \$36,000 | \$38,000 | \$40,000 | \$42,000 | \$44,000 | \$46,000 |
| Depreciation | \$346,000 | \$359,000 | \$372,000 | \$386,000 | \$400,000 | \$415,000 |
| Interest Payments [3] | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other | \$26,000 | \$27,000 | \$28,000 | \$30,000 | \$32,000 | \$34,000 |
| Subtotal (NPWS) | \$927,000 | \$963,000 | \$999,000 | \$1,038,000 | \$1,078,000 | \$1,120,000 |
| Total (DWS and NPWS) | | | | | | |
| Administrative | \$386,000 | \$401,000 | \$416,000 | \$432,000 | \$449,000 | \$466,000 |
| Contract Services | \$914,000 | \$948,000 | \$983,000 | \$1,020,000 | \$1,057,000 | \$1,096,000 |
| Professional Services | \$103,000 | \$107,000 | \$111,000 | \$115,000 | \$120,000 | \$125,000 |
| Water Purchase from EMWD | \$2,423,000 | \$2,511,000 | \$2,602,000 | \$2,696,000 | \$2,794,000 | \$2,895,000 |
| Legal Services | \$36,000 | \$38,000 | \$40,000 | \$42,000 | \$44,000 | \$46,000 |
| Depreciation | \$529,000 | \$549,000 | \$569,000 | \$591,000 | \$613,000 | \$636,000 |
| Interest Payments [3] | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other | \$81,000 | \$84,000 | \$88,000 | \$93,000 | \$98,000 | \$103,000 |
| Expenses (Total) | \$4,472,000 | \$4,638,000 | \$4,809,000 | \$4,989,000 | \$5,175,000 | \$5,367,000 |
| Capital Improvements [4] | \$0 | \$387,333 | \$387,333 | \$387,333 | \$387,333 | \$387,333 |
| Total Expenses and Capital Improvements | \$4,472,000 | \$5,025,333 | \$5,196,333 | \$5,376,333 | \$5,562,333 | \$5,754,333 |

Notes:

[1] Projected expenses shown do not include expenses from the City's Water Fund and Capital Grants/Contingencies records. These expenses, which include post-employment benefit adjustments and infrastructure capital assets contributed by developers to the City, are typically one-time transactions that may not reoccur in the future.

[2] Projected expenses during FY 22-23 are based on the average inflation rate during 2022 applied to the historical five-year average expenses a. Projected increases after FY 22-23 are based on the average historical inflation rate.

[3] There are no projected interest payments because loans/indebtedness were written off as approved by City Council.

[4] The CIP of \$5.8 million is anticipated to be spread out evenly over 15 years, beginning in FY 2023-24.

Table 8. Summary of Projected Revenues (No Increase in Water Rates)

| | PROJECTED REVENUES [1] | | | | | |
|----------------------------------|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY22-23 | FY23-24 | FY24-25 | FY25-26 | FY26-27 | FY27-28 |
| Downtown Water System | | | | | | |
| Consumption (HCF) | 699,220 | 699,220 | 699,220 | 699,220 | 699,220 | 699,220 |
| Service Charge | \$554,688 | \$554,688 | \$554,688 | \$554,688 | \$554,688 | \$554,688 |
| Consumption Charge | \$2,073,209 | \$2,073,209 | \$2,073,209 | \$2,073,209 | \$2,073,209 | \$2,073,209 |
| Other [2] | \$42,221 | \$42,221 | \$42,221 | \$42,221 | \$42,221 | \$42,221 |
| Subtotal (DWS) | \$2,670,118 | \$2,670,118 | \$2,670,118 | \$2,670,118 | \$2,670,118 | \$2,670,118 |
| North Perris Water System | | | | | | |
| Consumption (HCF) | 280,636 | 280,636 | 280,636 | 280,636 | 280,636 | 280,636 |
| Service Charge | \$224,999 | \$224,999 | \$224,999 | \$224,999 | \$224,999 | \$224,999 |
| Consumption Charge | \$701,591 | \$701,591 | \$701,591 | \$701,591 | \$701,591 | \$701,591 |
| Other [2] | \$10,999 | \$10,999 | \$10,999 | \$10,999 | \$10,999 | \$10,999 |
| Subtotal (NPWS) | \$937,589 | \$937,589 | \$937,589 | \$937,589 | \$937,589 | \$937,589 |
| Total (DWS and NPWS) | | | | | | |
| Consumption (HCF) | 979,857 | 979,857 | 979,857 | 979,857 | 979,857 | 979,857 |
| Service Charge | \$779,687 | \$779,687 | \$779,687 | \$779,687 | \$779,687 | \$779,687 |
| Consumption Charge | \$2,774,799 | \$2,774,799 | \$2,774,799 | \$2,774,799 | \$2,774,799 | \$2,774,799 |
| Other [2] | \$53,220 | \$53,220 | \$53,220 | \$53,220 | \$53,220 | \$53,220 |
| Revenues (Total) | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 |

Notes:

[1] Projected FY 2022-23 revenues are based on the historical five-year average revenues. Projected revenues from FY 2023-24 through FY 2027-28 are based on an annual 10 percent increase in consumption and service charges.

[2] "Other" revenues are based on records provided by the City and include water turn on service, water meter connection, water equity, and water repair fees. "Other" revenues are not projected to increase.

Table 9. Summary of Projected Revenues (Incorporating a 10% Annual Rate Increase)

| | PROJECTED REVENUES [1] | | | | | |
|----------------------------------|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY22-23 | FY23-24 | FY24-25 | FY25-26 | FY26-27 | FY27-28 |
| Downtown Water System | | | | | | |
| Consumption (HCF) | 699,220 | 699,220 | 699,220 | 699,220 | 699,220 | 699,220 |
| Service Charge | \$554,688 | \$610,157 | \$671,173 | \$738,290 | \$812,119 | \$893,331 |
| Consumption Charge | \$2,073,209 | \$2,280,530 | \$2,508,583 | \$2,759,441 | \$3,035,385 | \$3,338,924 |
| Other [2] | \$42,221 | \$42,221 | \$42,221 | \$42,221 | \$42,221 | \$42,221 |
| Subtotal (DWS) | \$2,670,118 | \$2,932,907 | \$3,221,976 | \$3,539,952 | \$3,889,725 | \$4,274,475 |
| North Perris Water System | | | | | | |
| Consumption (HCF) | 280,636 | 280,636 | 280,636 | 280,636 | 280,636 | 280,636 |
| Service Charge | \$224,999 | \$247,499 | \$272,249 | \$299,474 | \$329,421 | \$362,363 |
| Consumption Charge | \$701,591 | \$771,750 | \$848,925 | \$933,817 | \$1,027,199 | \$1,129,919 |
| Other [2] | \$10,999 | \$10,999 | \$10,999 | \$10,999 | \$10,999 | \$10,999 |
| Subtotal (NPWS) | \$937,589 | \$1,030,248 | \$1,132,173 | \$1,244,290 | \$1,367,619 | \$1,503,281 |
| Total (DWS and NPWS) | | | | | | |
| Consumption (HCF) | 979,857 | 979,857 | 979,857 | 979,857 | 979,857 | 979,857 |
| Service Charge | \$779,687 | \$857,656 | \$943,421 | \$1,037,764 | \$1,141,540 | \$1,255,694 |
| Consumption Charge | \$2,774,799 | \$3,052,279 | \$3,357,507 | \$3,693,258 | \$4,062,584 | \$4,468,842 |
| Other [2] | \$53,220 | \$53,220 | \$53,220 | \$53,220 | \$53,220 | \$53,220 |
| Revenues (Total) | \$3,607,707 | \$3,963,155 | \$4,354,149 | \$4,784,242 | \$5,257,344 | \$5,777,756 |

Notes:

[1] Projected FY 2022-23 revenues are based on the historical five-year average revenues. Projected revenues from FY 2023-24 through FY 2027-28 are based on an annual 10 percent increase in consumption and service charges.

[2] "Other" revenues are based on records provided by the City and include water turn on service, water meter connection, water equity, and water repair fees. "Other" revenues are not projected to increase.

Table 10. Summary of Projected Surpluses/Deficits

| | PROJECTED SURPLUS/DEFICIT [1] | | | | | |
|-------------------------------------|-------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | FY22-23 | FY23-24 | FY24-25 | FY25-26 | FY26-27 | FY27-28 |
| No Rate Increase | | | | | | |
| Expenses (Table 7) | \$4,472,000 | \$4,638,000 | \$4,809,000 | \$4,989,000 | \$5,175,000 | \$5,367,000 |
| Capital Improvements (Table 7) | \$0 | \$387,333 | \$387,333 | \$387,333 | \$387,333 | \$387,333 |
| Total Expenses | \$4,472,000 | \$5,025,333 | \$5,196,333 | \$5,376,333 | \$5,562,333 | \$5,754,333 |
| Total Revenues (Table 8) | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 | \$3,607,707 |
| Surplus / (Deficit) | (\$864,293) | (\$1,417,627) | (\$1,588,627) | (\$1,768,627) | (\$1,954,627) | (\$2,146,627) |
| Proposed 10% Annual Increase | | | | | | |
| Expenses (Table 7) | \$4,472,000 | \$4,638,000 | \$4,809,000 | \$4,989,000 | \$5,175,000 | \$5,367,000 |
| Capital Improvements (Table 7) | \$0 | \$387,333 | \$387,333 | \$387,333 | \$387,333 | \$387,333 |
| Total Expenses | \$4,472,000 | \$5,025,333 | \$5,196,333 | \$5,376,333 | \$5,562,333 | \$5,754,333 |
| Total Revenues (Table 9) | \$3,607,707 | \$3,963,155 | \$4,354,149 | \$4,784,242 | \$5,257,344 | \$5,777,756 |
| Surplus / (Deficit) | (\$864,293) | (\$1,062,178) | (\$842,185) | (\$592,092) | (\$304,990) | \$23,423 |

6.0 Review of Local/Regional Current Water System Rates

As discussed in Section 3, both the DWS and NPWS water bills primarily consist of two components. The first component is the base rate or “monthly service charge” a customer pays to access water from the DWS or NPWS based on the size of the meter at the customer’s property. The second component is the “water consumption charge” which is calculated based on actual water usage by each customer (measured in HCF, or one hundred cubic feet) and multiplied by the unit cost of water.

The City’s current water rates were compared to other retail water providers in the geographic vicinity of the City. This comparison is shown in Table 11. The comparison includes the existing water rates for DWS, NPWS, EMWD, Western Municipal Water District, and Elsinore Valley Municipal Water District.

As previously noted, the City has predominantly $\frac{3}{4}$ -inch meters. In addition, for purposes of comparing current typical monthly and annual water bills to the proposed water rates discussed above, as well as to the current water rates for other agencies, an average annual City household use of about 20 HCF per month was incorporated (based on the average total annual use of 979,857 HCF from Table 2 divided by 4,124 existing metered accounts).

The estimated monthly cost for 20 HCF of water is approximately \$72 and \$63 for the DWS and NPWS customers, respectively. In comparison, the estimated average monthly water bill for a residential customer within each of the aforementioned water systems ranges from about \$85 (EMWD) to about \$105 per year (Western Municipal Water District). A summary of these estimated annual monthly costs are also provided on Table 11. The average monthly cost of water from these other vicinity water retailers is about \$95. Consequently, the City's current cost of water is about 66 to 75 percent of the average of the other water retailers.

Table 11. Water Rate Comparison

| Water System | Downtown Water System (DWS) | North Perris Water System (NPWS) | Eastern Municipal Water District (Includes Remaining Portions of City of Perris) | Western Municipal Water District | Elsinore Valley Municipal Water District |
|--|-----------------------------|----------------------------------|--|----------------------------------|--|
| Source | [1] | [1] | [2] | [3] | [4] |
| Monthly Service Charge (\$) | \$12.92 | \$12.92 | \$15.20 | \$37.36 | \$31.95 |
| Capital Fee | - | - | \$5.47 | - | - |
| Consumption Charge (\$ per HCF) | | | | | |
| Tier 1 | \$2.70 | \$2.50 | \$1.17 | \$1.88 | \$2.72 |
| Tier 2 | \$5.16 | - | \$3.75 | \$2.97 | \$3.57 |
| Tier 3 | - | - | \$6.22 | \$4.11 | \$6.43 |
| Tier 4 | - | - | \$12.73 | \$4.69 | \$8.38 |
| Reliability Charge | - | - | - | \$0.42 | - |
| Pumping Charge | - | - | - | Up to \$.072 | - |
| Tier 1 Limit (HCF) | 18 | - | 4 | 7 (Est.) | 9 |
| Monthly Bill Estimate (20 HCF) | \$71.84 | \$62.92 | \$85.35 | \$104.75 | \$95.70 |
| Proposed FY 2023-24 (Table 12) | \$79.02 | \$69.21 | NA | \$109.08 | \$100.18 |
| Proposed FY 2024-25 (Table 12) | \$86.93 | \$76.13 | NA | \$113.81 | \$104.73 |
| Proposed FY 2025-26 (Table 12) | \$95.62 | \$83.75 | NA | NA | NA |
| Proposed FY 2026-27 (Table 12) | \$105.18 | \$92.12 | NA | NA | NA |
| Proposed FY 2027-28 (Table 12) | \$115.70 | \$101.33 | NA | NA | NA |

Sources:

- [1] City of Perris
- [2] Eastern Municipal Water District
- [3] <https://www.wmwd.com/574/Water-Sewer-Rates>
- [4] <https://www.emwd.com/customers/customer-service/rates-fees>

NA = Not Available

The proposed water rates (i.e. annual 10 percent increase for both the monthly service charges and the consumption charges from FY 2023-24 through FY 2027-28) for DWS and NPWS and the resulting estimated typical monthly water charges are also presented in Table 11 and Table 12. With these potential alternative water rates, the typical household water charge may increase approximately \$44 per month (61 percent) over 5 years for DWS and \$39 per month (61 percent) over five years for NPWS.

These proposed water rates represent the water rates that would allow the City to break even on the revenues vs. expenses for DWS and NPWS.

Table 12. Summary of Projected Water Rate Increases (DWS and NPWS)

| Year | System | Monthly Service Charge (\$) | Consumption Charge (\$ per HCF) | | Monthly Bill Estimate (Based on 20 HCF) |
|-------------------------------------|--------|-----------------------------|---------------------------------|--------|---|
| | | | Tier 1 | Tier 2 | |
| FY 2022-23 (Existing) | DWS | \$12.92 | \$2.70 | \$5.16 | \$71.84 |
| | NPWS | \$12.92 | \$2.50 | - | \$62.92 |
| FY 2023-24 (Proposed Year 1) | DWS | \$14.21 | \$2.97 | \$5.68 | \$79.02 |
| | NPWS | \$14.21 | \$2.75 | - | \$69.21 |
| FY 2024-25 (Proposed Year 2) | DWS | \$15.63 | \$3.27 | \$6.24 | \$86.93 |
| | NPWS | \$15.63 | \$3.03 | - | \$76.13 |
| FY 2025-26 (Proposed Year 3) | DWS | \$17.20 | \$3.59 | \$6.87 | \$95.62 |
| | NPWS | \$17.20 | \$3.33 | - | \$83.75 |
| FY 2026-27 (Proposed Year 4) | DWS | \$18.92 | \$3.95 | \$7.55 | \$105.18 |
| | NPWS | \$18.92 | \$3.66 | - | \$92.12 |
| FY 2027-28 (Proposed Year 5) | DWS | \$20.81 | \$4.35 | \$8.31 | \$115.70 |
| | NPWS | \$20.81 | \$4.03 | - | \$101.33 |

Notes:

Based on 10 percent annual increase in both the monthly service charge and consumption charge over the next five years (from FY 2023-24 through 2027-28)

7.0 Findings and Conclusions

The City's two water systems have each been operating with the following average annual deficits from Fiscal Year 2017-18 through Fiscal Year 2021-22:

- DWS average annual deficit (\$611,000)
- NPWS average annual deficit (\$159,000)
- Combined Average Annual Deficit (\$770,000)

The City requires additional revenue to offset ongoing projected annual deficit resulting from its operational expenses (including projected operational and capital improvement expenses). In order to reduce and eventually eliminate the annual deficit, which currently averages (\$770,000) per year and is projected to increase to over (\$2.1 million), water rates will need to be increased. If the City's water consumption rates and monthly service charges are increased at a rate of 10 percent per year over the next five (5) years, from FY 2023-24 through FY 2027-28, the projected deficits will be reduced and will result in a "breakeven" scenario for the City by the 5th year (in FY 2027-28).