2018 Financial Plan
Pima County
Regional Wastewater Reclamation Enterprise Fund

Prepared by
Pima County Finance and Risk Management Department
April 2018
Executive Summary

BACKGROUND

On an annual basis, Pima County reviews the financial information for the sanitary sewer services provided by its Regional Wastewater Reclamation Department. The focus of the review is to determine the optimal sewer rates needed to ensure that the County has sufficient revenues to meet all operating and maintenance expenses, debt service payments, required reserves, and to maintain an adequate debt service ratio to obtain favorable bond ratings. This enables the County to continue to issue debt for the anticipated improvements in the Capital Improvement Program.

RECOMMENDATIONS

Based on this review, the Finance and Risk Management Department is recommending:

1. Issuing $155 million of new sewer revenue obligations to fund future capital improvement projects as follows:
   a. $45 million in Fiscal Year 2018-19,
   b. $40 million in Fiscal Year 2019-20,
   c. $35 million in Fiscal Year 2020-21, and
   d. $35 million in Fiscal Year 2021-22.

2. Using unrestricted cash to prepay debt as follows:
   a. $16.6 million in Fiscal Year 2017-18,
   b. $12.4 million in Fiscal Year 2018-19,
   c. $22.4 million in Fiscal Year 2019-20,
   d. $36.1 million in Fiscal Year 2020-21, and
   e. $19.9 million in Fiscal Year 2021-22

3. Maintaining the current sewer revenue rates, other than those that may be necessary for equity purposes among classes of users.
INTRODUCTION

This report addresses the financial needs for the Regional Wastewater Reclamation Department based on the projected revenues, projected expenses, and projected capital improvement program expenses for Fiscal Year 2017-18 through Fiscal Year 2021-22.

KEY ASSUMPTIONS

The Finance and Risk Management Department (Finance) worked with the Regional Wastewater Reclamation Department (Department) and the Regional Wastewater Reclamation Advisory Committee to develop these assumptions. The major assumptions include:

- relatively slow growth in the customer base,
- an increase in user fees and connection fees at the rate of population growth,
- a declining volume usage rate factor based on a five-year average,
- a capital improvement program of approximately $200 million,
- additional sewer revenue debt of $200 million, and
- using unrestricted cash for the prepayment of debt.

Appendix A further describes the assumptions used in this report.

METHODOLOGY

Finance used the following methods to determine optimal sewer rates.

1. Analyzed the revenue generating potential of the Department’s existing sewer rates.
2. Identified the projected cash needs of the Department for upcoming capital projects, anticipated operating and maintenance costs, debt service payments for existing debt, anticipated debt service payments for planned debt, and planned prepayment of future debt.
3. Compared the revenue generating potential of the existing rates to the Department’s identified cash needs to determine whether rate changes may be necessary. Finance used an industry standard debt service ratio comparing revenues less operating and maintenance costs to debt service requirements for this analysis.
4. Analyzed the Department’s cash balances, the effects of Arizona’s local expenditure limitation on the Department, and the Department’s debt ratings.

The estimates used for this analysis are as of January 31, 2018. Projected amounts change throughout the year as plans are refined and actual costs are determined.
REVENUES

Fees:

The County’s wastewater system generates revenues from two major sources, sewer user fees and sewer connection fees.

User fees are the combination of: (1) the standard service fee and (2) the volume rate fee. Rate increases or decreases depend upon future growth in the number of new users and volume usage rate. The Department will not collect user fee revenues above the current level without a rate increase, or growth in these two factors. The last rate increase took effect in June 2017.

Connection fees are charged when new construction connects to the sewer system for the first time or when renovation of existing structures requires additional or larger water meters. Connection fees are based primarily on water meter size, with fees increasing as water meter size increases. The principal factor that will affect revenues from future connection fees will be the volume of new construction within Pima County.

For purposes of this financial analysis, future user fees and connection fees are projected to increase at the same rate as the estimated rate of population growth issued in January 2018 by the University of Arizona Economic & Business Research Center. These estimates project population growth rates to be between 0.59 percent and 0.83 percent between Fiscal Year 2018-19 and Fiscal Year 2021-22, as indicated in Appendix A.

Declining Volume Usage:

Another factor that must be considered in determining future revenue projections is the recent downward trend in total influent flow, the amount of sewage flowing into the treatment plants. This downward trend has had a negatively impacted on the billings for the volume rate component within the user fee revenue calculation. The amount billed is based on an average water usage, also known as the winter quarter average, taken from the months of December, January, and February. As the monthly water consumption decreases, the amounts billed and collected also decrease. Based on the review of user fee revenues billed and collected for the past five years, this downward trend has decreased revenues on average by approximately 2.0 percent. Therefore, we have utilized a 98.0 percent (100 percent – 2.0 percent = 98.0 percent) rate factor for future year projections. This is consistent with the experience of the water providers who serve the area and have been reporting decreases in water usage.
**Total Revenues:**

Future system revenues are expected to decrease. Fiscal Year 2018-19 revenues are projected to decrease slightly from the prior fiscal year due to reduced volume usage, despite the increase in population growth. From Fiscal Year 2019-20 through Fiscal Year 2021-22, user fee revenues are expected to remain relatively flat. Figure 1, shows Total Revenues by Type, for Fiscal Year 2016-17, including projections through Fiscal Year 2021-22, with a portion of those revenues attributable to connection fees.

**Figure 1: Total Revenues by Type**

![Total Revenues by Type](image)

As detailed in Table 1, Connection Fees are expected to remain at or below $13.1 million.

**Table 1: Total Revenues by Type – Detail (in Millions)**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Connection Fees</th>
<th>User Fees</th>
<th>Other Revenue</th>
<th>Total Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>13.1</td>
<td>157.0</td>
<td>3.0</td>
<td>173.1</td>
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<tr>
<td>2018</td>
<td>12.1</td>
<td>160.8</td>
<td>2.0</td>
<td>174.9</td>
</tr>
<tr>
<td>2019</td>
<td>11.5</td>
<td>159.4</td>
<td>1.4</td>
<td>172.3</td>
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<td>2020</td>
<td>11.6</td>
<td>158.2</td>
<td>0.9</td>
<td>170.7</td>
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<tr>
<td>2021</td>
<td>11.7</td>
<td>157.2</td>
<td>1.0</td>
<td>169.9</td>
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<tr>
<td>2022</td>
<td>11.8</td>
<td>156.2</td>
<td>0.9</td>
<td>168.9</td>
</tr>
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</table>
CAPITAL IMPROVEMENT PROGRAM

As shown in Figure 2, capital expenditures are estimated to be $202 million through the end of Fiscal Year 2021-22. Typically, an additional $35 to $45 million in capital improvements are anticipated annually, thereafter.

Figure 2: Capital Project Costs

Projected future capital expenditures may change throughout the year as plans are refined and actual construction costs are determined. This analysis uses the Department’s estimate of capital projects as of January 2018. A summary of these capital projects for Fiscal Year 2017-18 through Fiscal Year 2021-22 can be found in Appendix C, Summary of Planned Capital Improvement Projects as of April 2018. As discussed on page 11, in the Expenditure Limitation section, for expenditure limitation reasons, Pima County must continue to borrow funds for the $202 million planned capital improvements program, even though the County has cash available in the fund.
OPERATING AND MAINTENANCE EXPENSES

The Department is expecting to complete Fiscal Year 2017-18 with Operating and Maintenance (O&M) expenses of $82.4 million. The budget for Fiscal Year 2018-19 has not yet been approved by the Board of Supervisors. For analysis purposes, the Department’s recommended budget is $83.5 million. Increases in operating costs of one to two percent are estimated for the following fiscal years. Employee compensation is expected to be $31.5 million in Fiscal Year 2018-19, representing 38 percent of total operating expenses and accounting for the greatest portion of O&M costs. This financial analysis assumes that operating expenses will continue to increase by one percent each year, starting in Fiscal Year 2019-20 and increase by two percent each year, starting in Fiscal Year 2021-22. At this rate of increase, O&M costs are expected to increase by approximately $4.4 million during the next four-year period. Figure 3 shows the increase in O&M expenses from Fiscal Year 2017-18 to Fiscal Year 2021-22.

Figure 3: Operating and Maintenance Expenses

*Operating and Maintenance Expenses, excluding a non-cash accounting entry for Pension expenses
SEWER REVENUE DEBT FINANCING

As of June 30, 2017, Pima County had $538 million of sewer revenue debt outstanding. The County is issuing another $45 million in sewer obligations in April 2018 and plans to issue an additional $155 million of new sewer revenue obligations over the next four years. Figure 4 shows the amounts and timing of the future debt issues.

Figure 4: $155 Million of Additional Debt 2019 Through 2022

As discussed in the Cash Reserves and Cash Balances, and the Expenditure Limitation section, although the County has unrestricted cash in the Sewer Fund, the County cannot use the available cash directly for capital projects due to constitutional expenditure limitation restrictions. Instead, the County needs to finance its capital programs through debt. The County plans to use the available unrestricted cash to prepay existing debt as soon as possible.
DEBT SERVICE PAYMENTS

Total debt service payments are expected to remain constant over the next few years, because the County anticipates issuing additional debt as shown in Figure 4 and utilizing unrestricted cash to prepay debt. Debt service for Fiscal Year 2017-18 will be $70.0 million, with the use of $16.6 million in unrestricted cash to prepay the 2008 Sewer Bonds. $8.3 million of the prepaid 2008 Sewer Bonds are scheduled for payment at the end of Fiscal Year 2017-18. In this way, current year debt service payments were reduced from $74.6 million in debt payments last year.

Figure 5 shows the debt service payments from Fiscal Year 2016-17 and the projected payments through Fiscal Year 2027-2028.

Figure 5: Debt Service Payments

Table 2, details the impact on the debt service payments by year, if unrestricted cash is used to prepay debt service payments and debt is issued according to the Rate Workbook (see Appendix B) for Fiscal Years 2017-18 to 2023-24, and $40 million in debt is issued each Fiscal Year from 2024-25 to 2027-28.
As shown in Table 2, when planned new debt is issued, the debt service payments without prepayments are expected to increase to $91 million in Fiscal Year 2020-2021, with an average of $84 million between now and Fiscal Year 2021-22. However, if the Department uses unrestricted cash to prepay debt, the Department’s highest debt service payment will be $70 million in Fiscal Year 2018-19, with an average payment of $66 million between now and Fiscal Year 2021-22.

### CASH RESERVES AND CASH BALANCES

The Pima County Regional Wastewater Reclamation Enterprise Fund has unrestricted cash and several types of restricted and designated cash accounts to meet the various debt covenants and to maintain an emergency fund that enables the County to handle unexpected events. Appendix D, *Cash Position Assuming the Prepayment of $107.4 Million of Debt between 2017-18 and 2021-22*, shows the balances and projected balances of the cash accounts. As of Finance and Risk Management’s January 31, 2018 Cash Flow report, the Fund will have an estimated $150 million in cash at the end of Fiscal Year 2017-18, of which $62 million is currently estimated to be unrestricted. The restricted and designated cash accounts described below include the remaining $87.6 million balances:

1. **Emergency Reserve Fund** (Unrestricted) – In Fiscal Year 2009-2010, the Board of Supervisors established a $20 million Emergency Reserve Fund. The fund is for unexpected events affecting the ongoing operations of the sewer system.

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<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Debt Service on Existing Debt</th>
<th>Planned Debt Service on New Debt</th>
<th>Total Planned Debt Service WITHOUT Prepayments</th>
<th>Total Planned Prepayments</th>
<th>Total Planned Debt Service AFTER Prepayment</th>
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<tbody>
<tr>
<td>2017</td>
<td>74.6</td>
<td>-</td>
<td>74.6</td>
<td>-</td>
<td>74.6</td>
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<tr>
<td>2018</td>
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<td>78.3</td>
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<td>2019</td>
<td>77.8</td>
<td>2.6</td>
<td>80.4</td>
<td>10.1</td>
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<td>2020</td>
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<td>85.1</td>
<td>19.7</td>
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<tr>
<td>2021</td>
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<td>15.1</td>
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<td>2022</td>
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<tr>
<td>2024</td>
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<td>12.8</td>
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<td>17.9</td>
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<tr>
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<td>2028</td>
<td>8.8</td>
<td>50.8</td>
<td>59.6</td>
<td>-</td>
<td>59.6</td>
</tr>
</tbody>
</table>
2. **Operating Reserve Fund** (Partially Restricted) – Various debt instruments require the County to maintain a 30 day balance of anticipated operating expenses. Pima County maintains 90 days of anticipated operating expenses in this fund, the remaining 60 days of reserve of cash is designated by management for operating expenses. By the end of Fiscal Year 2017-18, these reserves are projected to be $20.5 million.

3. **Debt Service Reserve Fund** (Restricted) – This restricted fund is used to set aside cash for sewer debt service payments. On a monthly basis, the County transfers one-twelfth of budgeted annual debt service into this reserve account to ensure cash is available for the annual debt service payments. These funds will be applied to the final debt service payments for the respective debt. By the end of Fiscal Year 2017-18, these debt reserves are projected to be $40.6 million.

4. **Bond Proceeds** (Restricted) – This restricted fund is used to restrict the bond proceeds received until the funds are spent for the various bond projects. By the end of the Fiscal Year 2017-18, this reserve is projected to be $6.5 million.

### Rating Agency Debt Service Ratio

**Net Operating Revenue to Debt Service:**

Net operating revenues are the regular, recurring revenues generated by operating the sewer system that remain after paying for sewer system operating expenses. Net operating revenues must be sufficient to do two things: (1) cover the required debt service payments and required reserves and (2) generate a sufficient margin that enables the County to pay non-operating costs and maintain additional reserves for unforeseen events.

Bond rating agencies use a basic ratio of net operating revenues to debt service to evaluate the financial health of governmental sewer operations. A ratio of 1 indicates that net operating revenues match debt service payments – net operating revenues are 100 percent of debt service payments. A ratio of less than 1, for example, 0.9, indicates that net revenues are less than, or in this example 90 percent of, debt service payments. A ratio of greater than 1, for example, 1.3, indicates that net revenues are larger than, or in this example 130 percent of, debt service payments.

Bond rating agencies have historically expected to see governmental sewer operators set rates that maintain a rating agency debt service ratio of 1.3. This enables governments to cover debt service payments and cash reserves, while making interest rates attractive to investors.
Since the beginning of the Regional Optimization Master Plan, Pima County administration has committed to setting rates that maintain a rating agency debt service ratio of 1.3. The Regional Wastewater Reclamation Advisory Committee formally stated this goal in a letter to Pima County’s Board of Supervisors. Pima County’s sewer revenue debt is highly rated and the County is able to sell debt for its Capital Improvement Program at low interest rates.

At its November 15, 2017 meeting, Pima County’s Regional Wastewater Reclamation Advisory Committee identified two factors that would trigger discussions about possible rate increases: a rating agency debt service ratio falling below 1.2 or unrestricted cash reserves of less than three months of operating expenses (approximately $21 million). As shown in Appendix B, the Fund’s rating agency debt service ratio does not fall below 1.2 nor does the unrestricted cash balance fall below $21 million through fiscal year 2023-24. These factors do not indicate a need for rate increases. Also at its November 15, 2017 meeting, the Advisory Committee authorized Finance and Risk Management to explore options for using unrestricted cash above the $21 million amount to pay off debt early.

In recent years, Pima County has not needed to use its unrestricted financial reserves to pay for unforeseen events and the Fund has accumulated a significant balance (see Cash Balances section). Pima County’s Finance and Risk Management Department recommends the prepayment of sewer revenue debt discussed in the Debt Service Payments section while carefully monitoring unrestricted cash balances to ensure they stay at reasonable levels.

It is important to note that Pima County has two additional debt service ratios. These two ratios (the senior debt service ratio and the junior debt service ratio) are calculated differently than the rating agency debt service ratio. These two ratios are not used as indicators of financial health. They should not be used for financial planning in the same way the rating agency debt service ratio is used. These two ratios are used by external parties to make legal determinations about whether Pima County is violating the contractual provisions of its debt. By setting rates to keep the bond rating agency debt service ratio at or near its target of 1.3, Pima County will not violate the contractual provisions of its debt. Additional details about these two contractual debt service ratios can be found in Appendix E, Debt Service Ratio Calculations.

Appendix B provides more detail of the projected revenues, expenses, net operating revenues, and debt service ratios of the system.

**EXPENDITURE LIMITATION**

**Impact to Wastewater Projects:**

Due to the expenditure limitation restrictions in Article IX, Section 20, of the Arizona Constitution, the County is not able to use available cash to fund capital improvements on a pay-as-you-go basis. The expenditure limitation restricts the use of local revenues which consist of primary property taxes, impact fees, connection fees, including all fees charged for sewer services, and
any other fees charged for County services. The County may not exceed the expenditure limit even if the County has cash available to spend.

Although the County cannot use the cash to fund projects on a pay-as-you-go basis, the County may use the cash to pay debt service without impacting the expenditure limit. The County must fund sewer capital projects with borrowed funds, and use available unrestricted cash to pay the debt service on such funds, in order to comply with the expenditure limitation. The County is exploring relatively short-term financing that may allow for a modified pay-as-you-go approach.

**BOND RATING AGENCIES**

In March 2018, Fitch Ratings reaffirmed the County’s sewer debt rating of AA for the Senior Debt and AA- for the Junior Debt. In addition, in March 2018, Standard and Poor’s reaffirmed the County’s sewer debt rating of AA for the Senior Debt and AA for the Junior Debt. The issued reports explained the analysis of Pima County’s financial condition for its sewer debt. The bond ratings reflect the rating agencies evaluation of the financial stability of the County and its ability to repay debt. As ratings increase, the interest rates offered by lenders decrease, reducing the overall debt cost to the County.

**RECOMMENDATIONS**

The Regional Wastewater Reclamation Advisory Committee Recommendation:

During fiscal year 2016-2017 and 2017-18, the Finance and Risk Management Department met regularly with the Finance Subcommittee of the Regional Wastewater Reclamation Advisory Committee to discuss the Department’s financial activity and condition. The Finance Subcommittee moved and approved the following recommendation at its April 18, 2018 meeting.

*We support the findings and recommendations outlined in the 2018 Financial Plan. Specifically:*

1. *Continue to issue new sewer revenue debt as planned, to finance the capital needs of maintaining and expanding the County’s sewer system.*
2. *Use unrestricted cash as planned, to prepay sewer revenue debt.*
3. *An increase in revenues generated by sewer user fees is not needed at this time.*

The full Regional Wastewater Reclamation Advisory Committee moved and approved this recommendation at its April 26, 2018 regular meeting.
The 2018 Financial Plan’s Recommendations for Pima County:

1. Issuing $155 million of new sewer revenue obligations to fund future capital improvement projects as follows:
   a. $45 million in Fiscal Year 2018-19,
   b. $40 million in Fiscal Year 2019-20,
   c. $35 million in Fiscal Year 2020-21, and
   d. $35 million in Fiscal Year 2021-22.

2. Using unrestricted cash to prepay debt as follows:
   a. $16.6 million in Fiscal Year 2017-18,
   b. $12.4 million in Fiscal Year 2018-19,
   c. $22.4 million in Fiscal Year 2019-20,
   d. $36.1 million in Fiscal Year 2020-21, and
   e. $19.9 million in Fiscal Year 2021-22

3. Maintaining the current sewer revenue rates, other than those that may be necessary for equity purposes among classes of users.
LIST OF APPENDICES

Appendix A – Key Assumptions used for the 2018 Financial Plan

Appendix B – Rate Workbook

Appendix C – Summary of Planned Capital Improvement Projects as of April 2018

Appendix D – Cash Position Assuming the Prepayment of $107.4 Million

Appendix E – Debt Service Ratio Calculations