




MEMORANDUM

Date: May 25, 2021

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator 

Re: Regional Wastewater Reclamation Enterprise Fund 2021 Financial Plan

Attached is the 2021 Financial Plan for the Regional Wastewater Reclamation Enterprise Fund. The plan documents the financial status of the Regional Wastewater Reclamation Enterprise Fund and confirms fee increases are unlikely due to our prepayment of debt issuances with available cash reserves.

The Regional Wastewater Reclamation Advisory Committee voted unanimously to support the 2021 Financial Plan at their meeting on April 22, 2021.

Attachment

c: Jan Leshar, Chief Deputy County Administrator
Carmine DeBonis, Deputy County Administrator for Public Works
Yves Khawam, Assistant County Administrator
Michelle Campagne, Director, Finance and Risk Management
Jackson Jenkins, Director, Regional Wastewater Reclamation



2021 Financial Plan

Pima County

Regional Wastewater Reclamation Enterprise Fund

*Prepared by
Pima County Finance and Risk Management Department
May 2021*

2021 Financial Plan

Pima County Regional Wastewater Reclamation Enterprise Fund

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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 \$160 million of new sewer revenue obligations to fund future capital improvement projects as follows:
 - a. \$40 million in Fiscal Year 2021-22,
 - b. \$40 million in Fiscal Year 2022-23,
 - c. \$40 million in Fiscal Year 2023-24, and
 - d. \$40 million in Fiscal Year 2024-25.

2. Using unrestricted cash to prepay debt as follows:
 - a. \$21.4 million in Fiscal Year 2021-22,
 - b. \$16.3 million in Fiscal Year 2022-23
 - c. \$15.2 million in Fiscal Year 2023-24, and
 - d. \$20.4 million in Fiscal Year 2024-25.

3. Maintaining the current sewer revenue rates.

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 2020-21 through Fiscal Year 2024-25.

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 \$232 million,
- additional sewer revenue debt of \$160 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 February 28, 2021. 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 December 2020 by the University of Arizona Economic & Business Research Center. These estimates project population growth rates to be between 0.81 percent and 1.05 percent between Fiscal Year 2020-21 and Fiscal Year 2024-25, as indicated in Appendix A.

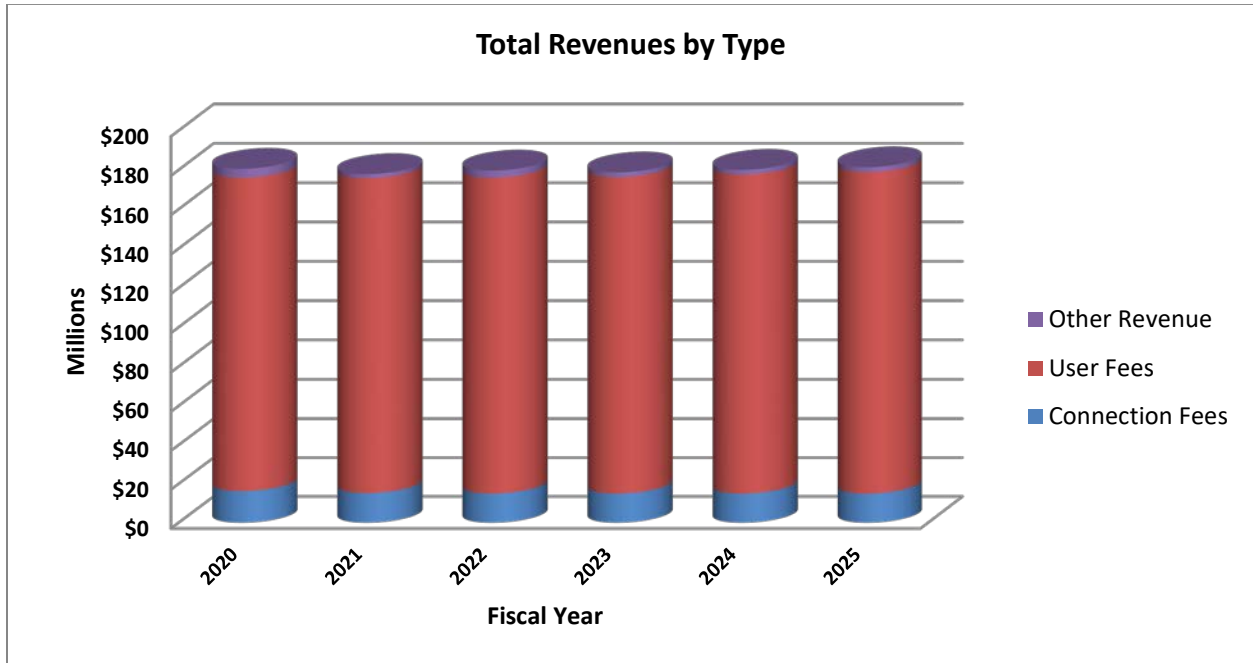
Declining Volume Usage:

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 negative impact 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 1.0 percent. Therefore, we have utilized a 99.0 percent (100 percent – 1.0 percent = 99.0 percent) rate factor for Fiscal Years 2021-22 and 2022-23 and a rate factor of 100 percent for Fiscal Years 2023-24 and 2024-25.

Total Revenues:

From Fiscal Year 2020-21 through Fiscal Year 2024-25, user fee revenues are expected to remain relatively flat. Figure 1, shows Total Revenues by Type, for Fiscal Year 2019-20, including projections through Fiscal Year 2024-25, with a portion of those revenues attributable to connection fees.

Figure 1: Total Revenues by Type



As detailed in Table 1, Connection Fees are expected to remain at approximately \$15.0 million.

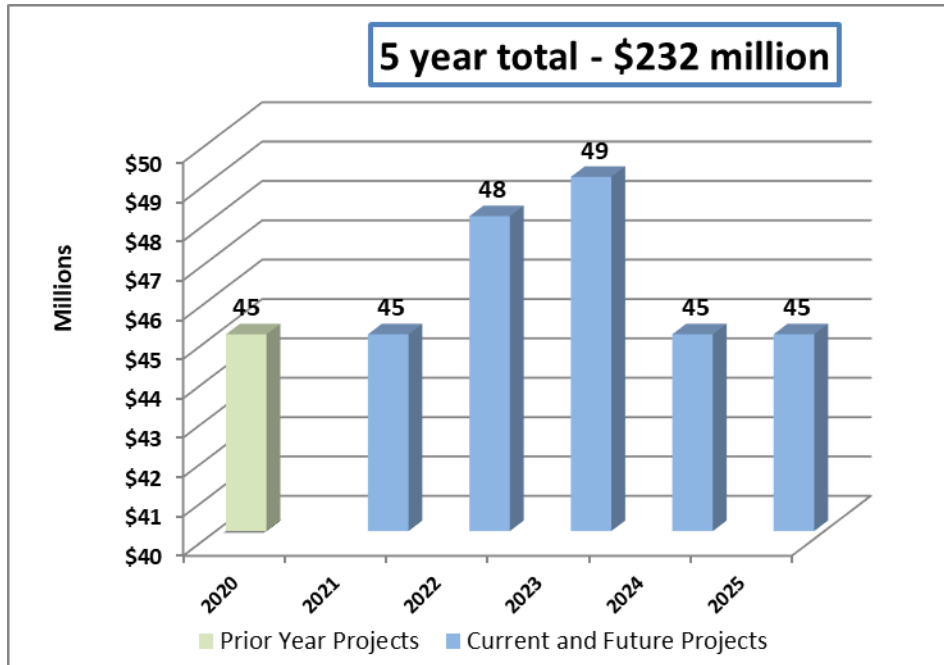
Table 1: Total Revenues by Type – Detail (in Millions)

Fiscal Year	Connection Fees	User Fees	Other Revenue	Total Revenues
2020	16.2	159.9	4.5	180.6
2021	15.3	160.6	2.0	177.9
2022	15.0	161.0	3.7	179.7
2023	15.0	161.3	2.4	178.7
2024	15.0	162.6	2.4	180.0
2025	15.0	163.9	2.4	181.3

CAPITAL IMPROVEMENT PROGRAM

As shown in Figure 2, capital expenditures are estimated to be \$232 million through the end of Fiscal Year 2024-25. An additional \$45 to \$49 million in capital improvements are anticipated annually, thereafter.

Figure 2: Capital Project Costs

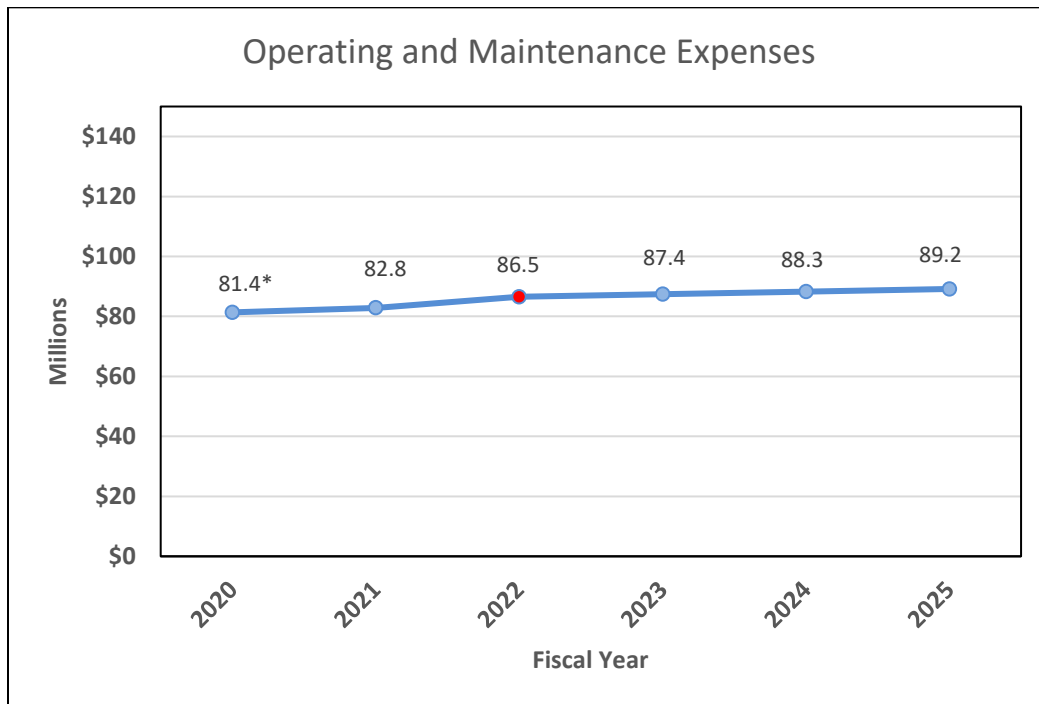


Projected future capital expenditures may change throughout the year as plans are refined and actual construction costs are determined. This analysis uses the Department’s estimate of capital projects as of March 2021. A summary of these capital projects for Fiscal Year 2020-21 through Fiscal Year 2024-25 can be found in Appendix C, *Summary of Planned Capital Improvement Projects as of March 2021*. As discussed on page 11, in the Expenditure Limitation section, for expenditure limitation reasons, Pima County must continue to borrow funds for the majority of the \$232 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 2020-21 with Operating and Maintenance (O&M) expenses of \$82.8 million. The budget for Fiscal Year 2021-22 has not yet been approved by the Board of Supervisors. For analysis purposes, the Department’s recommended budget is \$86.5 million. Employee compensation is expected to be \$30.6 million in Fiscal Year 2021-22, representing 35 percent of total operating expenses and accounting for the greatest portion of O&M costs. This financial analysis assumes that operating expenses will increase by one percent each year, starting in Fiscal Year 2022-23. At this rate of increase, O&M costs are expected to increase by approximately \$2.7 million during the next four-year period. Figure 3 shows the increase in O&M expenses from Fiscal Year 2019-20 to Fiscal Year 2024-25.

Figure 3: Operating and Maintenance Expenses

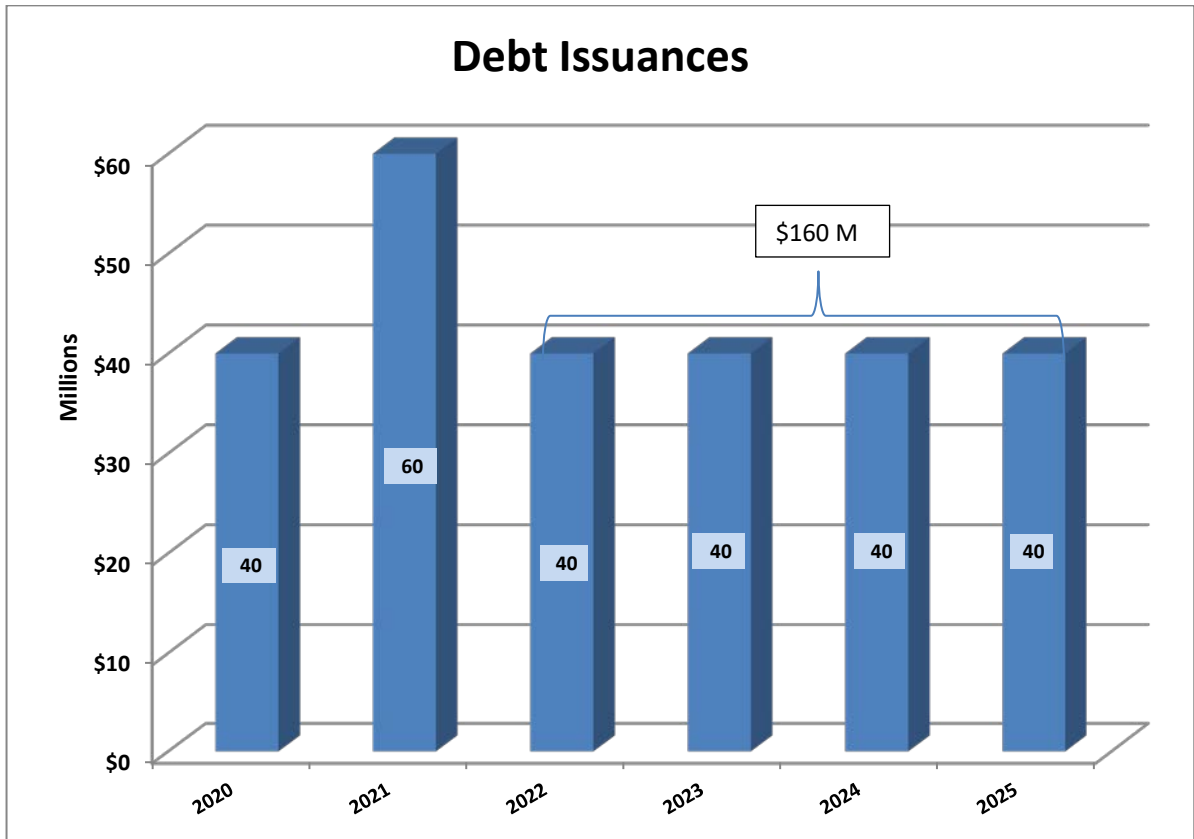


*Operating and Maintenance Expenses, excluding a non-cash accounting entry for Pension expenses.

SEWER REVENUE DEBT FINANCING

As of June 30, 2020, Pima County had \$454 million of sewer revenue debt outstanding. The County issued sewer obligations in December 2020 and plans to issue an additional \$160 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: \$160 Million of Additional Debt 2022 Through 2025



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 2020-21 will be \$66.2 million, with the use of \$33.7 million in unrestricted cash to prepay the 2011 Sewer Obligations and a portion of the 2012 Sewer Obligations.

Figure 5 shows the debt service payments from Fiscal Year 2019-20 and the projected payments through Fiscal Year 2024-25.

Figure 5: Debt Service Payments

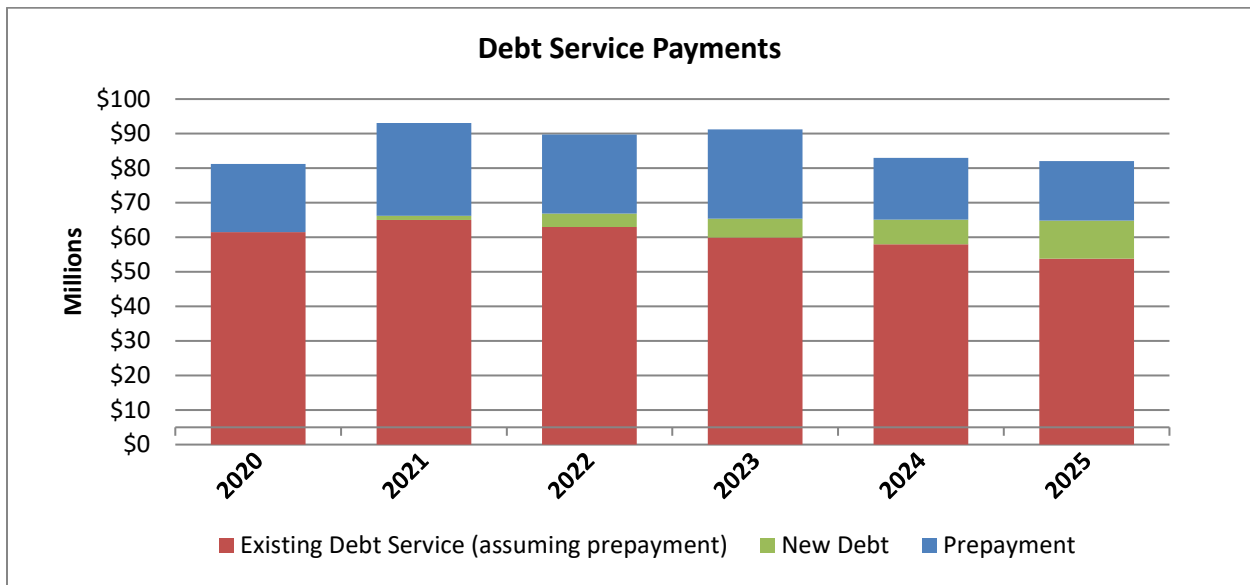


Table 2, details the impact on the debt service payments by year, if unrestricted cash is used to prepay debt service payments and debt is issued according to the Rate Workbook (see Appendix B) for Fiscal Years 2020-21 to 2024-25.

Table 2: Debt Service Payment – Detail (in Millions)

Fiscal Year	Debt Service on Existing Debt	Planned Debt Service on New Debt	Total Planned Debt Service WITHOUT Prepayments	Total Planned Prepayments	Total Planned Debt Service AFTER Prepayment
2020	81.2	0.0	81.2	19.7	61.5
2021	91.9	1.2	93.1	26.9	66.2
2022	85.8	3.9	89.7	22.8	66.9
2023	85.7	5.5	91.2	25.8	65.4
2024	75.9	7.1	83.0	17.9	65.1
2025	71.1	11.0	82.1	17.3	64.8

As shown in Table 2, when planned new debt is issued, the debt service payments without prepayments are expected to increase to \$91.2 million in Fiscal Year 2022-23, with an average of \$87.8 million between now and Fiscal Year 2024-25. However, if the Department uses unrestricted cash to prepay debt, the Department’s highest debt service payment will occur next fiscal year at \$66.9 million, with an average payment of \$65.7 million between now and Fiscal Year 2024-25.

CASH RESERVES AND CASH BALANCES
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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 Million of Debt between 2020-21 and 2024-25*, shows the balances and projected balances of the cash accounts. As of Finance and Risk Management’s February 28, 2021 Cash Flow report, the Fund will have an estimated \$155.2 million in cash at the end of Fiscal Year 2020-21, of which \$56.2 million is currently estimated to be unrestricted. The restricted and designated cash accounts described below include the remaining \$99.0 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.

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 2020-21, these reserves are projected to be \$20.7 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 2020-21, these debt reserves are projected to be \$31.2 million.
4. **Debt Proceeds (Restricted)** – This restricted fund is used to restrict the debt proceeds received until the funds are spent for the various capital projects. By the end of Fiscal Year 2020-21, this reserve is projected to be \$27.1 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. 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 during Fiscal Year 2019-20, the 2009 Water Infrastructure Finance Authority of Arizona (WIFA) Loan (i.e., senior debt) was paid off. Therefore, only the Sewer Obligation debt (i.e., junior debt) remains outstanding. The Sewer Obligation debt service ratio is calculated differently than the rating agency debt service ratio. This ratio is not used as an indicator of financial health. This ratio should not be used for financial planning in the same way the rating agency debt service ratio is used. This ratio is 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 this 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 limited on its use of available cash to fund capital improvements. 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.

Because of the expenditure limitation restrictions, the County will continue to finance capital improvements. However, the County will begin transitioning from long-term debt financing to relatively short-term debt financing over the next few years. For Wastewater, this transition to a pay-as-you-go approach will take at least 10 years.

BOND RATING AGENCIES

In November 2020, Fitch Ratings raised the County's sewer debt rating to AA for the Obligations. In addition, in November 2020, Standard and Poor's reaffirmed the County's sewer debt rating of AA. 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 2020-21 the Finance and Risk Management Department met with the Regional Wastewater Reclamation Advisory Committee to discuss the Department's financial activity and condition. The Finance and Risk Management Department presented the 2021 Financial Plan at the March 25, 2021 Regional Wastewater Reclamation Advisory Committee (RWRAC) meeting. At the April 22, 2021 RWRAC meeting, the committee voted unanimously to support the 2021 Financial Plan and Finance's recommendations outlined within the plan.

LIST OF APPENDICES

Appendix A – Key Assumptions used for the 2021 Financial Plan

Appendix B – Rate Workbook

Appendix C – Summary of Planned Capital Improvement Projects as of March 2021

Appendix D – Cash Position Assuming the Prepayment of \$107 Million

Appendix E – Debt Service Ratio Calculations

APPENDIX A

KEY ASSUMPTIONS 2021 Financial Plan

		Current Year					Totals		
ASSUMPTION REGARDING:		2021	2022	2023	2024	2025	2021-2025	Comments	
1	Population Growth Factors	1.0105	1.0100	1.0089	1.0082	1.0081		2021 UA Economic & Business Research Center estimates for FY 2021 - 2025.	
2	User Rate Increases:	Volumetric Fee increases	0.00%	0.00%	0.00%	0.00%	0.00%	Zero rate increase assumed for the next 4 years.	
		Service Charge	0.00%	0.00%	0.00%	0.00%	0.00%		
3	Volume Usage Rate Factor	0.99	0.99	0.99	1.00	1.00		Rate based on 5 year average decline in volume usage.	
4	Connection Fees	Population Growth	1.0105	1.0100	1.0089	1.0082	1.0081	2021 UA Economic & Business Research Center estimates for FY 2021 - 2025.	
		Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	Zero rate increase assumed for the next 4 years.	
5	Annual rate of expense increase			1.00%	1.00%	1.00%		Current year is based on projected expenses for Period 8. FY 2022 is based on Requested Budget amounts. For future years, assumption of 1% growth in operating costs over prior year's actual costs.	
6	Capital Projects	45,150,000	48,000,000	49,000,000	45,000,000	45,000,000	232,150,000	For Fiscal Years 2021 - 2025, amounts per RWRD's March 2021 CIP Schedule.	
7	Debt Assumptions								
	Sewer Obligations	60,000,000	40,000,000	40,000,000	40,000,000	40,000,000	220,000,000		
8	Interest Rate Assumptions	3.00%	3.00%	3.00%	3.00%	3.00%			

APPENDIX B

Regional Wastewater Reclamation Department Enterprise Fund
 Financial Projections - Rating Agency Ratio 1.2 or above and Unrestricted Cash Greater than Three Months of Operating Expenses
 Fiscal Years 2020 through 2025

February 2021 CURRENT FORECAST

	Actuals FY19-20	Adopted Budget FY20-21	Forecasted FY20-21	Assumptions			
				FY21-22	FY22-23	FY23-24	FY24-25
Customers	284,446	282,526	287,433	290,307	292,891	295,292	297,684
Population Growth - UA Estimates	1.0123	1.0075	1.0105	1.0100	1.0089	1.0082	1.0081
Volume Rate	3.6287	3.6287	3.6287	3.6287	3.6287	3.6287	3.6287
Rate factor - Volume Fee	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Service Charge Rate	13.0000	13.0000	13.0000	13.0000	13.0000	13.0000	13.0000
Rate factor - Flat Service Charge	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Rate factor - Connection Fee	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Rate factor - O&M Expenses	1.0000	1.0000	1.0000	1.0483	1.0100	1.0100	1.0100
CCF - Calculated Flow Estimate	9.2649	9.3359	9.1954	9.1035	9.0124	9.0124	9.0124
Rate factor - Volume	0.9505	0.9900	0.9925	0.9900	0.9900	1.0000	1.0000

	Actuals FY19-20	Adopted Budget FY20-21	Forecasted FY20-21	Forecasted			
				FY21-22	FY22-23	FY23-24	FY24-25
System Revenues:							
Volumetric User Fee	114,796,559	116,335,019	115,069,576	115,078,736	114,941,907	115,884,431	116,823,095
Fixed User Administrative Fee	44,373,576	44,074,056	44,839,499	45,287,894	45,690,956	46,065,622	46,438,753
Sanitation Fees	689,246	675,000	700,000	675,000	675,000	675,000	675,000
Total Sewer Utility Service	159,859,381	161,084,075	160,609,075	161,041,629	161,307,863	162,625,053	163,936,848
Sewer Connection Revenue	16,244,806	14,500,000	15,250,000	15,000,000	15,000,000	15,000,000	15,000,000
Interest	3,796,587	2,180,000	1,175,027	2,110,000	894,748	899,893	899,733
Other Income including Biogas	692,728	1,037,771	855,214	1,543,172	1,543,172	1,543,172	1,543,172
Total Revenues	180,593,502	178,801,846	177,889,316	179,694,801	178,745,783	180,068,117	181,379,753
Operations and Maintenance Costs	81,357,616	82,551,844	82,827,730	86,542,052	87,407,473	88,281,547	89,164,363
Net Revenues	99,235,886	96,250,002	95,061,586	93,152,749	91,338,310	91,786,570	92,215,390
Existing Debt Service - Senior Debt	-	-	-	-	-	-	-
Existing Debt Service - Subordinate Debt	61,564,119	64,990,600	64,990,600	63,044,007	59,950,447	57,951,672	53,847,417
Total Existing Debt Service Payments	61,564,119	64,990,600	64,990,600	63,044,007	59,950,447	57,951,672	53,847,417
Proposed Debt Service	-	400,000	1,238,115	3,910,750	5,498,944	7,149,111	10,992,313
Total Debt Service Payments	61,564,119	65,390,600	66,228,715	66,954,757	65,449,391	65,100,782	64,839,730
Rating Agency Ratio	1.61	1.47	1.44	1.39	1.40	1.41	1.42
Net Revenues after Debt Service Payments	37,671,767	30,859,402	28,832,871	26,197,993	25,888,919	26,685,788	27,375,660
Transfers out - COPs 2018	(4,803,319)	(4,897,669)	(4,897,669)	-	-	-	-
Transfers out - COPs 2020A	-	(10,041,667)	(10,041,667)	-	-	-	-
Transfer out - SDF	-	-	-	(5,000,000)	(5,000,000)	(5,000,000)	(5,000,000)
Debt Service Reserve (Obligations) Transfer	(5,882,375)	(3,450,000)	(4,606,875)	(3,690,556)	(3,835,556)	(3,479,841)	(3,568,254)
Operating Transfer In - Debt Reserve	11,502,572	9,471,369	9,280,084	1,852,194	-	-	-
Other Operating Transfers Out	(515,929)	(454,840)	(1,694,942)	(290,399)	(290,399)	(290,399)	(290,399)
Prepayment of 2009 WIFA Loans	(2,997,871)	-	-	-	-	-	-
Prepayment of 2010 Obligations	(19,664,275)	-	-	-	-	-	-
Prepayment of 2011 Obligations	-	(24,413,625)	(23,770,274)	-	-	-	-
Prepayment of 2012 Obligations	-	(10,192,375)	(9,897,521)	(21,377,750)	-	(11,224,500)	(11,225,000)
Prepayment of 2014 Obligations	-	-	-	-	(8,243,813)	(4,020,000)	(4,220,000)
Prepayment of 2016 Obligations	-	-	-	-	(8,076,812)	-	(5,000,000)
Net Changes in Assets and Liabilities	(4,819,199)	(1,323,615)	(11,370)	(65,480)	(842,973)	(1,266,382)	(1,916,612)
Subtotal	10,491,371	(14,443,020)	(16,807,362)	(2,373,998)	(400,633)	1,404,666	(3,844,605)
Beginning Unrestricted Cash Balance	66,723,819	82,883,105	82,883,105	56,159,862	53,093,194	52,505,796	53,628,889
Change in Restrictions of Cash	5,667,915	(700,000)	(9,915,881)	(692,669)	(186,765)	(281,573)	(646,077)
Ending Unrestricted Cash Balance	82,883,105	67,740,085	56,159,862	53,093,194	52,505,796	53,628,889	49,138,206

CIP Projections	45,462,746	45,150,000	45,150,000	48,000,000	49,000,000	45,000,000	45,000,000
Sewer Revenue debt	40,000,000	40,000,000	60,000,000	40,000,000	40,000,000	40,000,000	40,000,000
COPs debt							

APPENDIX C

PIMA COUNTY
Summary of Planned Capital Improvement Projects
As of March 2021



Department: WW - Regional Wastewater Reclamation

Program Code	Program Name	Estimated Prior Year	Fiscal Year 2021/22	Fiscal Year 2022/23	Fiscal Year 2023/24	Fiscal Year 2024/25	Fiscal Year 2025/26	Fiscal Year 2026/27	Fiscal Year(s) Beyond	Program Total
CWW.322SC9	WW - 22nd St Swan to Craycroft Augmentation Phase 2	\$ -	\$ -	\$ -	\$ 750,000	\$ 1,750,000	\$ -	\$ -	\$ -	\$ 2,500,000
CWW.3ANOMX	WW - Anammox Treatment Process	2,976,488	7,023,512	-	-	-	-	-	-	10,000,000
CWW.3ASC15	WW - Old Nogales Interc. Aug - New Aerospace Corr Sewer	28,704,027	10,785,962	9,688,867	-	-	-	-	-	49,178,856
CWW.3AVEOB	WW - Avra Valley WRF Emergency Overflow Basin	-	-	-	2,906,117	3,200,000	-	-	-	6,106,117
CWW.3CFS15	WW - Continental Ranch Pump Station - Second Force Main	10,468,347	10,112,994	12,418,659	-	-	-	-	-	33,000,000
CWW.3COC21	WW - Conveyance Odor Control Program Projects FY20/21	609,000	1,000	-	-	-	-	-	-	610,000
CWW.3COC22	WW - Conveyance Odor Control Program Projects FY21/22	-	599,000	1,000	-	-	-	-	-	600,000
CWW.3COC23	WW - Conveyance Odor Control Program Projects FY22/23	-	-	299,000	1,000	-	-	-	-	300,000
CWW.3COC24	WW - Conveyance Odor Control Program Projects FY23/24	-	-	-	299,000	1,000	-	-	-	300,000
CWW.3COC25	WW - Conveyance Odor Control Program Projects FY24/25	-	-	-	-	299,000	1,000	-	-	300,000
CWW.3CPS21	WW - Conveyance Pump Station Program Projects FY20/21	379,284	1,000	-	-	-	-	-	-	380,284
CWW.3CPS22	WW - Conveyance Pump Station Program Projects FY21/22	-	499,000	1,000	-	-	-	-	-	500,000
CWW.3CPS23	WW - Conveyance Pump Station Program Projects FY22/23	-	-	499,000	1,000	-	-	-	-	500,000
CWW.3CPS24	WW - Conveyance Pump Station Program Projects FY23/24	-	-	-	499,000	1,000	-	-	-	500,000
CWW.3CPS25	WW - Conveyance Pump Station Program Projects FY24/25	-	-	-	-	499,000	1,000	-	-	500,000
CWW.3CRISA	WW - Continental Ranch Interceptor Sewer Augmentation	-	-	-	2,000,000	-	-	-	-	2,000,000
CWW.3DRACH	WW - Drachman Augmentation - Santa Rita to UPRR ROW	-	-	-	3,000,000	8,000,000	-	-	-	11,000,000
CWW.3MMP21	WW - Sewer Utility Minor Modification Projects 20/21	231,480	1,000	-	-	-	-	-	-	232,480
CWW.3MMP22	WW - Sewer Utility Minor Modification Projects 21/22	-	99,000	1,000	-	-	-	-	-	100,000
CWW.3MMP23	WW - Sewer Utility Minor Modification Projects 22/23	-	-	99,000	1,000	-	-	-	-	100,000
CWW.3MMP24	WW - Sewer Utility Minor Modification Projects 23/24	-	-	-	99,000	1,000	-	-	-	100,000
CWW.3MMP25	WW - Sewer Utility Minor Modification Projects 24/25	-	-	-	-	99,000	1,000	-	-	100,000
CWW.3MOGA0	WW - Tres Rios WRF-Bldgs 30/36 Motor Oper Gates & Actuators	-	-	710,000	-	-	-	-	-	710,000
CWW.3MR221	WW - Sewer Manhole Rehabilitation #11	1,599,000	1,000	-	-	-	-	-	-	1,600,000
CWW.3MR222	WW - Sewer Manhole Rehabilitation #12	-	1,399,000	1,000	-	-	-	-	-	1,400,000
CWW.3MR223	WW - Sewer Manhole Rehabilitation Projects - FY 22/23	-	-	1,599,000	1,000	-	-	-	-	1,600,000
CWW.3MR224	WW - Minor Manhole Rehabilitation Projects FY23/24	-	-	-	1,499,000	1,000	-	-	-	1,500,000
CWW.3MR225	WW - Sewer Manhole Rehabilitation Projects FY24/25	-	-	-	-	1,599,000	1,000	-	-	1,600,000
CWW.3MRP21	WW - Minor Rehabilitation Projects FY 20/21	7,191,587	1,000	-	-	-	-	-	-	7,192,587
CWW.3MRP22	WW - Minor Rehabilitation Projects FY 21/22	-	4,283,320	1,000	-	-	-	-	-	4,284,320
CWW.3MRP23	WW - Minor Rehabilitation Projects FY 22/23	-	-	5,999,000	1,000	-	-	-	-	6,000,000
CWW.3MRP24	WW - Minor Pipe Rehabilitation Projects FY23/24	-	-	-	9,999,000	1,000	-	-	-	10,000,000
CWW.3MRP25	WW - Minor Rehabilitation Projects - FY24/25	-	-	-	-	9,999,000	1,000	-	-	10,000,000
CWW.3NWO19	WW - Northwest Outfall Siphon at the Santa Cruz River Rehab	184,320	1,358,027	-	-	-	-	-	-	1,542,347
CWW.3RI105	WW - ADOT W Ruthrauff Rd & Interstate 10 Sewer Modifications	170,566	40,000	20,000	-	-	-	-	-	230,566

APPENDIX C

PIMA COUNTY
Summary of Planned Capital Improvement Projects
As of March 2021



Department: WW - Regional Wastewater Reclamation

Program Code	Program Name	Estimated Prior Year	Fiscal Year 2021/22	Fiscal Year 2022/23	Fiscal Year 2023/24	Fiscal Year 2024/25	Fiscal Year 2025/26	Fiscal Year 2026/27	Fiscal Year(s) Beyond	Program Total
CWW.3SHGVI	WW - Sahuarita - Green Valley Interceptor	-	-	-	-	-	10,000,000	12,750,000	10,750,000	33,500,000
CWW.3SHWRF	WW - Sahuarita Wastewater Reclamation Facility	-	-	-	-	-	26,666,666	30,666,667	70,666,667	128,000,000
CWW.3SNI21	WW - SCADA Network Implementation FY21	349,000	1,000	-	-	-	-	-	-	350,000
CWW.3SNI22	WW - SCADA WAN & Computing Infrastructure Implementation	-	349,000	1,000	-	-	-	-	-	350,000
CWW.3SWT70	WW - System Wide Treatment Rehabilitation & Enhancement	-	-	-	1,534,000	6,700,000	8,400,000	-	-	16,634,000
CWW.3TDEIU	WW - Tres Rios Digester Electrical Infrastructure Upgrade	-	270,000	1,930,000	-	-	-	-	-	2,200,000
CWW.3TDS20	WW - Tucson Blvd Flow Mgmt Structure & Siphon Inlet Rehab	1,835,000	400,000	-	-	-	-	-	-	2,235,000
CWW.3THBOC	WW - Tres Rios Headworks Biofilter Odor Control	200,000	6,300,000	-	-	-	-	-	-	6,500,000
CWW.3TRCAB	WW - TRCAB Class A Biosolids	-	-	-	4,700,000	7,300,000	-	-	-	12,000,000
CWW.3TREBP	WW - Tres Rios WRF Emergency Backup Power	-	-	-	2,380,000	620,000	-	-	-	3,000,000
CWW.3TROCC	WW - TRWRF Operational Command Control Center	-	100,000	2,700,000	1,900,000	-	-	-	-	4,700,000
CWW.3TRP21	WW - System-Wide Treatment Rehabilitation Program	5,499,000	1,000	-	-	-	-	-	-	5,500,000
CWW.3TRP22	WW - System-Wide Treatment Rehabilitation Program	-	4,229,000	1,000	-	-	-	-	-	4,230,000
CWW.3TRP23	WW - System-Wide Treatment Rehabilitation Program	-	-	4,999,000	1,000	-	-	-	-	5,000,000
CWW.3TRP24	WW - System-Wide Treatment Rehabilitation Program	-	-	-	4,999,000	1,000	-	-	-	5,000,000
CWW.3TRP25	WW - System-wide Treatment Rehabilitation Program	-	-	-	-	4,999,000	1,000	-	-	5,000,000
CWW.3TRPTA	WW - TRWRF Primary Treatment Augmentation	-	-	3,620,000	3,880,000	-	-	-	-	7,500,000
CWW.3TRSTA	WW - TRWRF Sludge Thickening Augmentation	-	100,000	4,450,000	2,950,000	-	-	-	-	7,500,000
CWW.3VTMSE	WW - Vactor Truck Mechanical Separating Equipment	-	-	-	1,600,000	-	-	-	-	1,600,000
CWW.ARTBAR	WW - Barometers	485,156	58,000	-	-	-	-	-	-	543,156
Total Planned Expenses		\$ 60,882,255	\$ 48,012,815	\$ 49,038,526	\$ 45,000,117	\$ 45,070,000	\$ 45,072,666	\$ 43,416,667	\$ 81,416,667	\$ 417,909,713

APPENDIX D

Regional Wastewater Reclamation Enterprise Fund
Cash Position Assuming the Prepayment of \$107 Million
As of February 2021

	2020-21	2021-22	2022-23	2023-24	2024-25
Operations	101,527,552	99,153,553	98,752,920	100,157,585	96,312,980
Debt Proceeds for CIP Projects	50,618,430	49,448,240	49,245,269	52,724,993	56,223,247
CIP Projects	3,030,747	3,172,400	4,258,416	2,837,075	3,144,366
Estimated Cash Balance at End of Fiscal Year	155,176,729	151,774,193	152,256,605	155,719,653	155,680,593
<u>Less Reserves:</u>					
O&M - Operating Reserve	20,706,933	21,635,513	21,851,868	22,070,387	22,291,091
Debt Service Reserve	31,193,536	32,789,957	36,596,462	40,054,549	44,049,645
Construction - Debt Proceeds	27,116,398	24,255,529	21,302,479	19,965,828	20,201,651
Emergency Reserve	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000
Projected Ending Cash Balance after Reserve Requirements are met	56,159,862	53,093,194	52,505,796	53,628,889	49,138,206

Appendix E

Debt Service Ratio Calculations

The County has historically maintained the goals of a rating agency debt service ratio of at least 1.3 as discussed in the Debt Service Ratio section. This ratio is used by the rating agencies and serves as a good financial planning tool.

In addition to the rating agency debt service ratio, Pima County's sewer revenue debt has an additional ratio that is mandated by the debt covenants. This debt covenant ratio is used by external parties to determine Pima County's compliance with contractual obligations related to its debt. While this debt covenant ratio should be considered when setting rates, it should not be used as a financial planning tool in the same way that the rating agency debt service ratio is used. By setting rates to maintain a rating agency debt service ratio at or near 1.3, the County will comply with the required debt covenant ratio.

The two debt service ratio calculations are as follows:

- 1) **Rating Agency Debt Service** - The Bond Rating Agencies calculate the debt service ratio using the excess of net revenues over the required debt service. The rating agencies require a 1.3x debt ratio be maintained. A debt service ratio lower than 1.3 could cause rating agencies to downgrade future sewer debt from its current rating. The impact of a downgrade would be additional interest costs for future debt. This is the most conservative of the two calculations.

Rating Agency Debt Service Ratio =	$\frac{\text{Net Operating Revenues}}{\text{Debt Service Payments}}$
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- 2) **Sewer Obligation Debt Service Ratio** – The Sewer Obligation Debt Service Ratio is calculated by taking the net operating revenues plus unrestricted cash balance from the beginning of the fiscal year, over the amount of Debt. The County is required to maintain a 1.2x Debt Service Ratio. Failure to maintain a 1.2x triggers a default and provides a mechanism to force the County to increase rates.

Sewer Obl Debt Service Ratio =	$\frac{\text{Net Operating Revenues + Unrestricted Cash Balance}}{\text{Debt Service Payments}}$
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