

2015 Financial Plan

Regional Wastewater Reclamation Department and Finance and Risk Management Department

Summary and Recommendations:

This annual report addresses the financial needs for the Regional Wastewater Reclamation Department based on the projected revenues, projected expenses and projected capital improvement program for the current fiscal year and for next four fiscal years through Fiscal Year 2018-19. 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, all debt service payments and required reserves, and maintain an adequate debt service ratio to obtain favorable bond ratings. This will enable the County to continue to issue debt for the anticipated improvements in the Capital Improvement Program. Based on this review, the Finance and Risk Management Department is recommending:

1. The issuance of \$60 million of certificates of participation (COPs) in the current fiscal year as anticipated in the Adopted Budget.
2. The issuance of \$165 million of new sewer revenue obligations in the upcoming years as follows:
 - a. \$45 million in Fiscal Year 2015-16,
 - b. \$40 million in Fiscal Year 2016-17
 - c. \$45 million in Fiscal Year 2017-18, and
 - d. \$35 million in Fiscal Year 2018-19.
3. The early repayment of \$38 million of WIFA Loans and sewer revenue bonds as those debts become callable in Fiscal Year 2016-17.
4. The adoption a series of three automatic annual rate increases of 4.0 percent beginning July 1, 2015, July 1, 2016 and July 1, 2017.

2015 Financial Plan

Regional Wastewater Reclamation Department and Finance and Risk Management Department

On an annual basis, Pima County reviews the rate structure for the sanitary sewer services provided by its Regional Wastewater Reclamation Department and prepares a report and an analysis of the current fee structure for the Board of Supervisors in conjunction with the County's overall annual budget process. Last year in the 2014 Financial Plan, no rate increases were recommended for the current Fiscal Year, but the Plan did indicate the probable need for rate increases beginning in Fiscal Year 2015-16. As discussed in this report, the Pima County Finance and Risk Management Department is recommending three annual rate increases to address the increasing cost of operations and the increasing cost of debt service for the debt already incurred and planned to be issued to implement the Regional Optimization Master Plan adopted by the Board of Supervisors in 2007 and other system improvements.

KEY ASSUMPTIONS

Key assumptions used in this report are identified in Appendix A. The Finance and Risk Management Department worked with the Regional Wastewater Reclamation Department and the Regional Wastewater Reclamation Advisory Committee to develop these assumptions. The major assumptions include a relatively slow growth in the customer base, an increase in user fees and in connection fees at the rate of population growth, a capital program of \$245.4 million, additional sewer revenue debt of \$165 million, the early repayment of \$38.1 million of outstanding debt, and the issuance of an additional \$60 million of County certificates of participation to be used for the Wastewater capital improvement program.

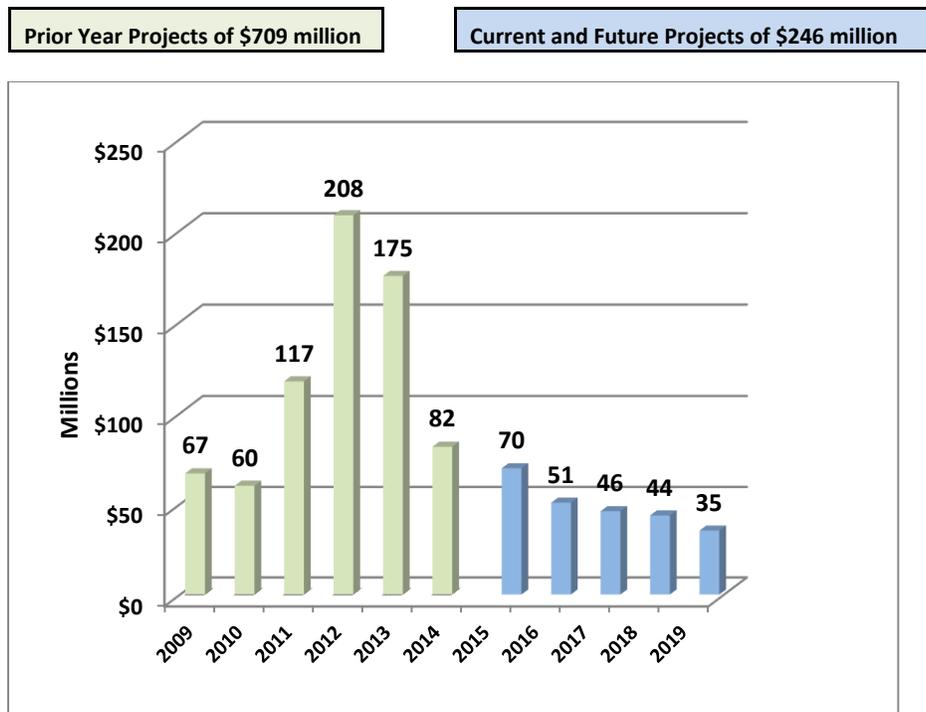
In order to determine rates, we have analyzed the projected cash needs of the Department for upcoming capital projects, the amount of total system revenues, the anticipated system operating and maintenance costs, and the debt service payments for existing debt and anticipated debt service payments for planned debt to be used to pay for the capital improvement program.

CAPITAL PROGRAM

Capital Improvement Program:

Pima County has completed significant construction of the Regional Optimization Master Plan (ROMP) which started in Fiscal Year 2008-09, as well as construction needed to perform ongoing improvements to the conveyance system and treatment system. Over the past decade, Pima County has had to address required upgrades to its sewer system to comply with federal and state environmental mandates and to replace the more than 50 year old Roger Road treatment facility. Those requirements caused the County to embark in Fiscal Year 2008-09 on what was then estimated to be a \$974 million capital improvement program. Through the years, the overall cost of the improvement program decreased, but is still expected to be a total of more than \$955 million, consisting of the \$709 million spent between Fiscal Year 2008-09 and Fiscal Year 2013-14 and the \$246 million anticipated capital expenditures over the next five years as projected as of December 2014. As shown in Figure 1, the County is past the highest levels of construction activity for ROMP and will have much lower capital needs in upcoming years. Capital expenditures are estimated to be \$245.4 million through the end of Fiscal Year 2018-19. An additional \$20 million to \$25 million of capital improvements are anticipated to be needed annually thereafter.

Figure 1 Capital Project Costs



Although the projected amount of anticipated capital expenditures changes throughout the year as plans are refined and actual construction costs are determined, the Department's estimate of capital projects as of December 2014 was used for this analysis. A summary of active capital projects for the Department for Fiscal Year 2014-15 and beyond can be found in the County's Adopted Budget beginning at page 15-12. An excerpt of that portion of the Adopted Budget is shown in Appendix A. As discussed below on page 13, regarding the Expenditure Limitation Impact on Wastewater Projects, even though revenues are increasing, Pima County must continue to borrow funds for the \$245.5 million planned capital improvements program.

REVENUES

User Fees and Connection Fees: Revenues from the wastewater system are generated from two major sources: sewer user fees and sewer connection fees.

User fees consist of the combination of (1) the standard service fee and (2) the volume rate fee. Five years ago, in 2010, the Board of Supervisors approved four automatic rate increases for user fees, with 6.5% annual increases to the standard service fee and 10% increases to the volume rate fee effective on July 1 of each year, with the last of these automatic rate increases taking effect on July 1, 2013. Without additional rate increases, user fee revenues are expected to remain relatively level for the foreseeable future, with increases dependent upon future growth in the number of new users.

Connection fees are charged for new construction connecting to the sewer system for the first time or for renovation of existing improvements which require additional or larger water meters. Connection fees are established based primarily on water meter size, with increasing fees as water meter sizes increase. The principal factor that will affect revenues from future connection fees will be the level 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 of increase as the estimates for population growth issued in August 2014 by the University of Arizona Economic & Business Research Center. Those estimates project population growth rates to be between 1.178% and 1.566% during the next four years, as shown in the assumptions in Appendix A to this Financial Plan.

Declining system influent affecting revenues: 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. As Table 1, below, shows, the annual influent flow for the system has been decreasing by about 2 percent each year for a total decrease of 8.6 percent since 2009. The influent volume has decreased from 23.8 billion gallons per year in Fiscal Year 2009 to 21.8 billion gallons in Fiscal Year 2014. Revenues from the volumetric portion of the user fees represents about 68 percent of total revenues. Absent any growth or rate increase, a 2 percent decline in influent could represent a potential 1.36 percent decline in revenues, or about

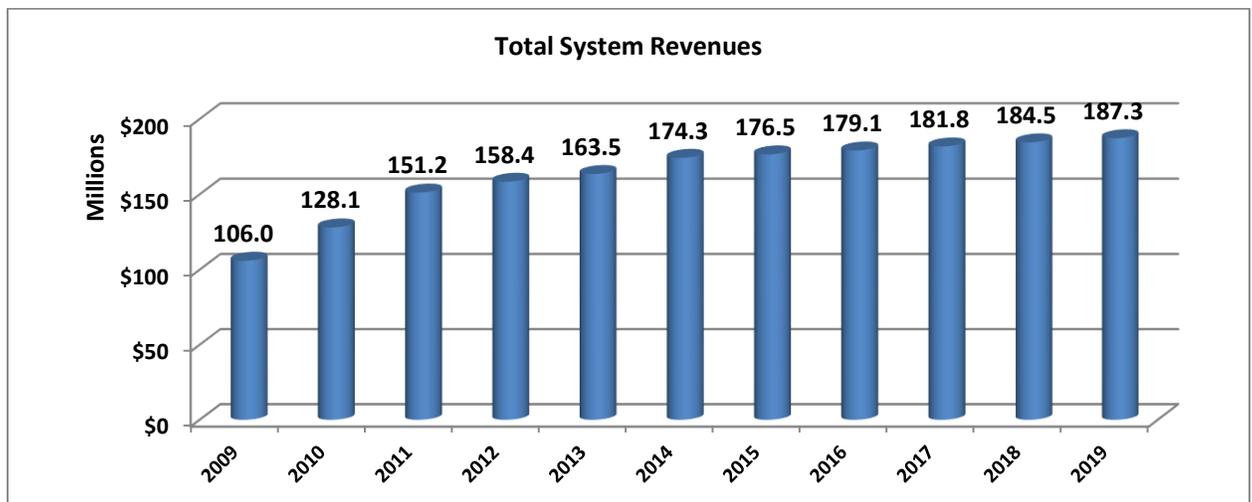
\$2.4 million annually. This is consistent with the experience of the water providers that serve the area which have been reporting decreases in water usage by customers. Because water volume use impacts the revenues from the volume rate fees, the steady decline in water flows would tend to reduce revenues that otherwise would increase due to new customers or to rate increases.

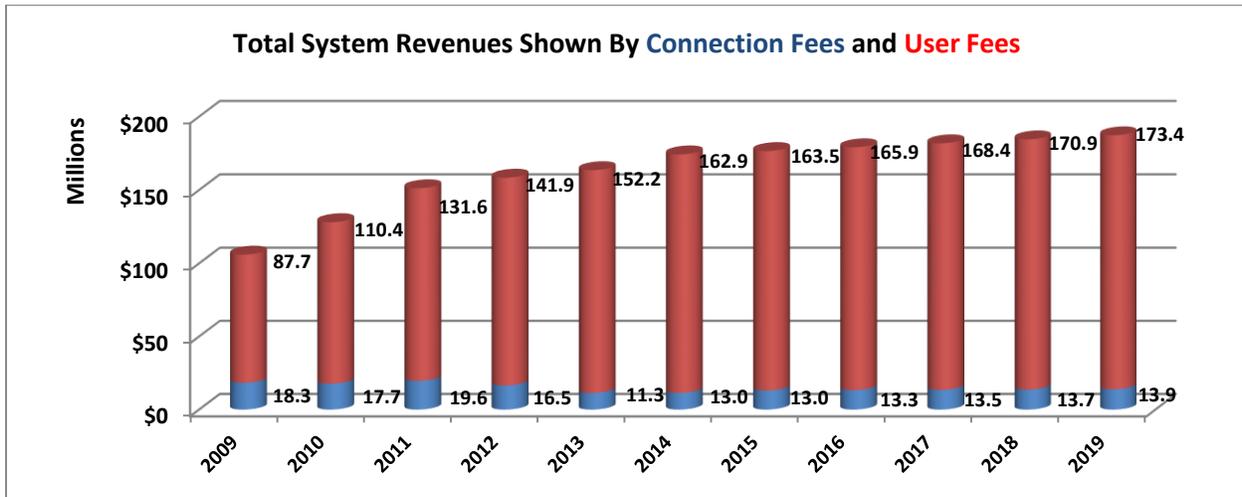
Table 1 Decreasing Influent

Fiscal Year	Total Influent (in Millions of Gallons)	Annual Percentage Decrease	Cumulative Decrease Since 2009
FY 2008-2009	23,851.95	0.0%	
FY 2009-2010	23,348.57	2.1%	2.1%
FY 2010-2011	22,797.57	2.4%	4.4%
FY 2011-2012	22,701.13	0.4%	4.8%
FY 2012-2013	22,236.45	2.0%	6.8%
FY 2013-2014	21,798.15	2.0%	8.6%

Total System Revenues: Over the past six years, total sewer system revenues increased more than 64 percent from \$106.0 million in Fiscal Year 2008-09 to \$174.3 million in Fiscal Year 2013-14 due primarily to annual rate increases for user fees. This year, however, system revenues are expected to increase by only about one percent to \$176.5 million, with \$163.5 million (or 93 percent) derived from sewer user fees and \$13.0 million from connection fees. Revenues are expected to remain relatively flat again, increasing to \$179.1 million next year. Figure 2 show total revenues from 2009 and projected to 2019 and the portion of those revenues attributable to connection fees and attributable to user fees. Connection fees are expected to remain below \$14 million for the foreseeable future.

Figure 2:

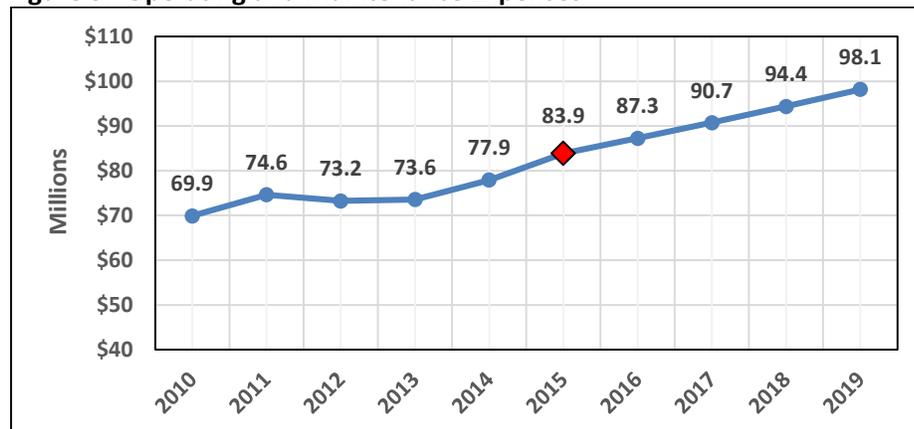




OPERATING AND MAINTENANCE EXPENSES

Projected Operating and Maintenance Expenses: The Department is expecting to complete the current Fiscal Year 2014-15 with Operating and Maintenance (O&M) expenses of \$83.9 million. The budget for Fiscal Year 2015-16 has not yet been determined, but for purposes of this analysis, the County is anticipating a four percent increases in operating costs each year. The most significant portion of O&M costs relate to employee compensation, which, at \$34.1 million next fiscal year, represents 41 percent of total operating expenses. In addition, the expense for Consultant and Outside Services is expected to be \$12.1 million this year. This significant increase over last year’s \$7.9 million reflects the impact of the privatization of the operations of the new Agua Nueva Water Reclamation Facility which replaced the old Roger Road plant. This financial analysis assumes that operating expenses will continue to increase by four percent each year. At that rate of increase, the O&M costs are expected to increase by approximately \$14 million (approximately \$3.6 million annually) during the next four year period. Figure 3 shows the increase in Operation and Maintenance Expenses since 2010 and the projected increase.

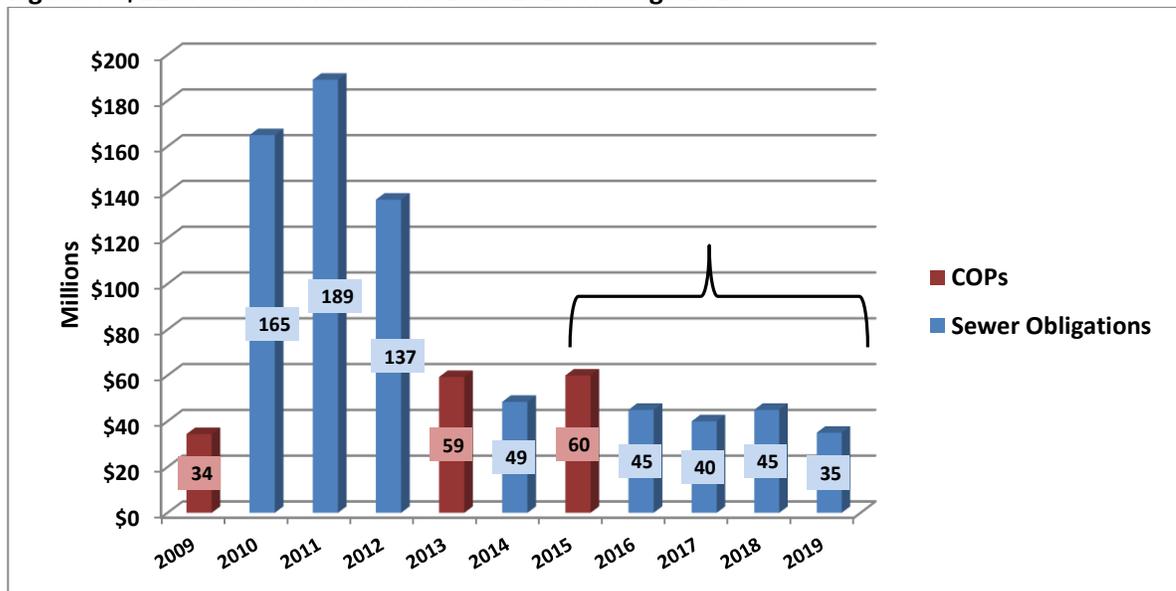
Figure 3: Operating and Maintenance Expenses



DEBT FINANCING

Sewer Revenue Debt Issues: As of June 30, 2014, Pima County had \$649.9 million of sewer revenue debt outstanding. The County plans to issue another \$60 million of certificates of participation (COPs) later this fiscal year and an additional \$165 million of new sewer revenue obligations in the next four years. Although the anticipated 2015 COPs issues will not be secured by sewer system revenues, repayment will be made from the cash generated from the system. Thus, an additional \$225 million of debt (\$60 million of Pima County COPs and \$165 million of sewer revenue debt, bracketed below) will be issued to fund the anticipated \$246 million of construction projects discussed above. Figure 4 shows the amounts and timing of the future debt issues.

Figure 4 \$225 Million of Additional Debt 2015 Through 2019



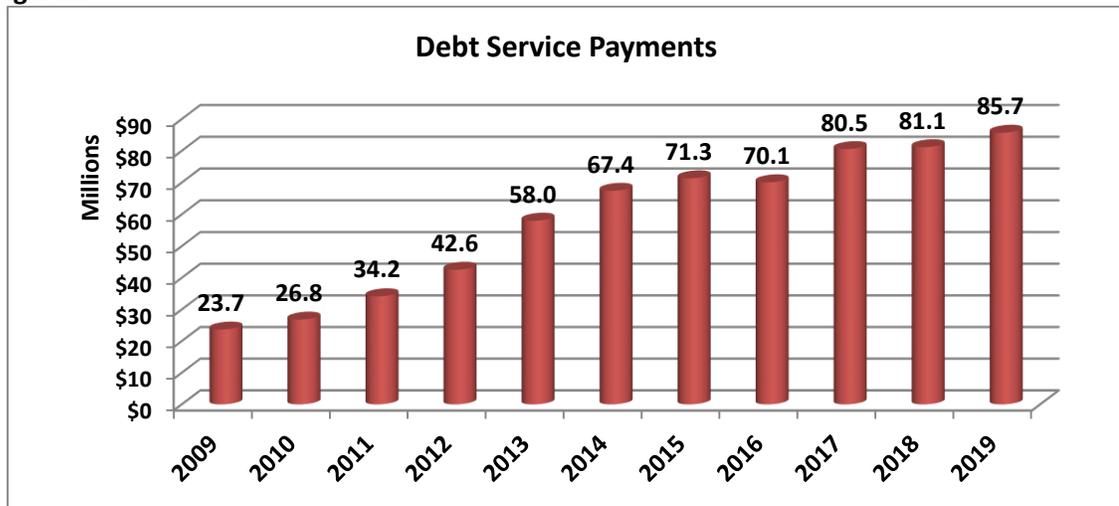
As discussed in more detail below in the section relating to Cash Reserves, Cash Balances and the Expenditure Limitation, even though the County has unrestricted cash in the sewer fund, the County cannot use the available cash for capital projects due to constitutional expenditure limitation restrictions. Instead, the County needs to finance its capital programs through debt financing. The County has used the available unrestricted cash, however, to significantly decrease the overall debt service requirements by issuing COPs (with accelerated repayment schedules) and by prepaying existing debt as soon as possible. After 2019, it is anticipated that the County will be able to finance ongoing sewer capital needs without issuing any new revenue debt but rather through recurring issues of Certificates of Participation to pay for capital improvements on essentially a modified pay-as-you-go basis with very rapid repayment of debt.

DEBT SERVICE PAYMENTS

Debt Service Payments: Because the County has issued significant debt in the last few years and anticipates additional debt as described above, total debt service payments are expected to continue to increase in the next few years even though the annual level of projects is declining. Debt service for the current fiscal year will be \$71.3 million, up from \$67.4 million last year.

As additional debt is issued, the debt service payments have steadily increased over the past five years and are expected to continue to increase at least through 2019 to be \$85.7 million. Debt service is expected to remain relatively flat thereafter through 2023. Historic and projected annual debt service payments through Fiscal Year 2018-19 are show in Figure 5.

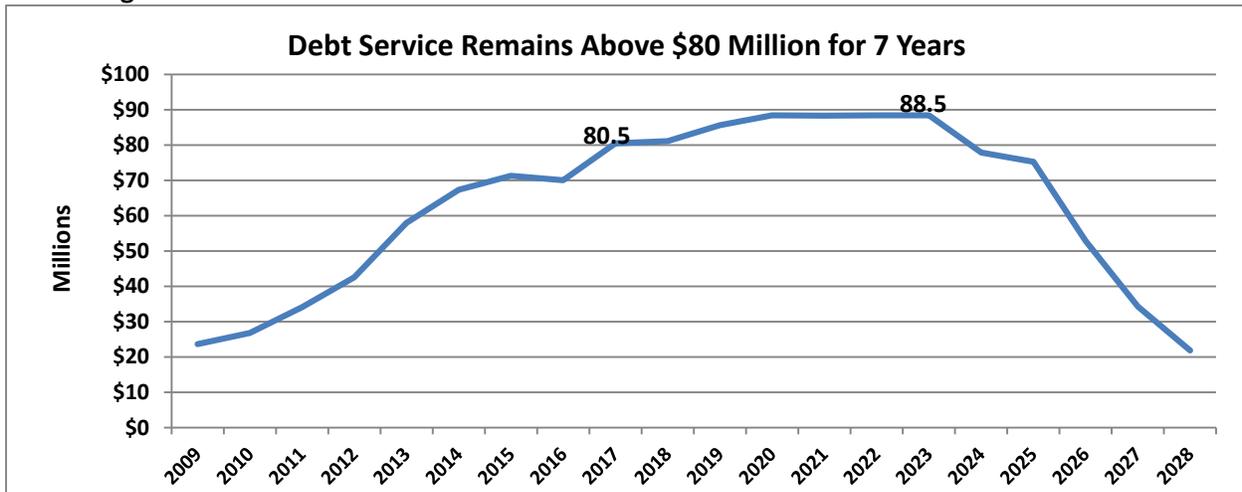
Figure 5



The projections of debt service for future debt include an assumption that Pima County will use available cash to accelerate the payment of principal on debt and thereby reduce debt service requirements. This financial plan incorporates using available cash to pay down \$38.1 million of existing debt in Fiscal Year 2016-17 and to pay \$60 million through new Certificates of Participation which are not included in the figure above, but which have the effect of reducing the debt service that would otherwise exist. Although debt service for the COPs is not included as part of the debt service shown above, it is still paid with unrestricted cash from the sewer system. Debt service is expected to continue to increase to almost \$88.5 million by 2020 and remain near that level for three years, beginning to decrease rapidly after Fiscal Year 2022-23.

Figure 6 shows the historical rise in debt service payments and the projected payments through 2028. It is important to note that these estimates assume that the County issue no new sewer revenue pledged debt after 2019. This assumption is based on staff's belief that the County will be able to use recurring COPs to fund ongoing capital projects after that. If the County does issue more debt secured by sewer revenues after 2019, the estimated debt service will increase.

Figure 6



DEBT SERVICE RATIO

Debt Service Ratio – Net Operating Revenue to Debt Service: After paying for operational expenses, the remaining revenue, known as “net operating revenues” (i.e., total system revenues less the O&M expenses) must still be sufficient (1) to meet the required debt service payments and required reserves, and (2) to have a sufficient margin necessary to enable the County to maintain favorable bond ratings. To minimize debt service, the County issues only enough debt to provide cash needed within the next 12 months for the capital improvement program. Absent any rate increases, the net operating revenues from the system are expected to decline to about \$89.2 million as total revenues increase at a slower rate than increases in expenses. During this same period, debt service is expected to increase from \$71.3 million to \$85.7 million by Fiscal Year 2018-19, an increase of \$14.4 million, or 20.2 percent.

Appendix B provides more detail of the projected revenues, expenses and net operating revenues of the system. Figure 7, below, shows the relationship between projected net revenues available for debt service and the projected debt service through Fiscal Year 2018-19.

Figure 7

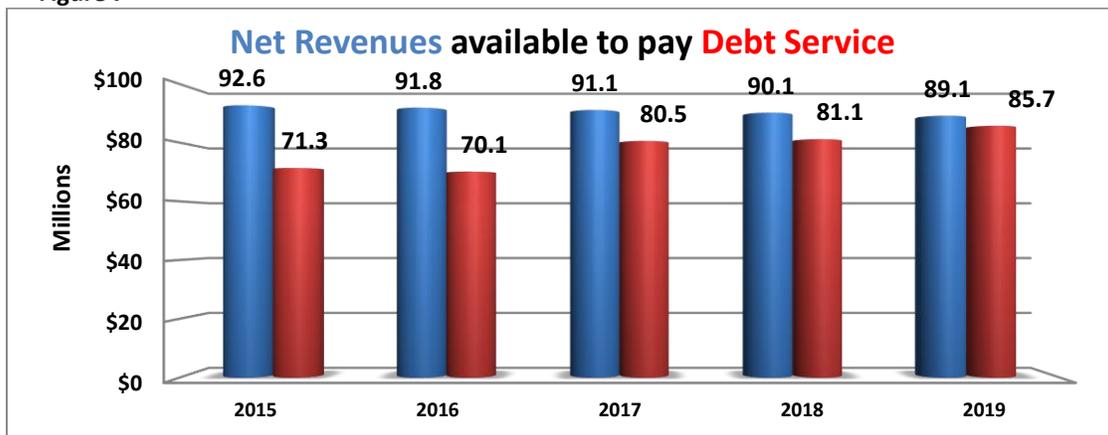
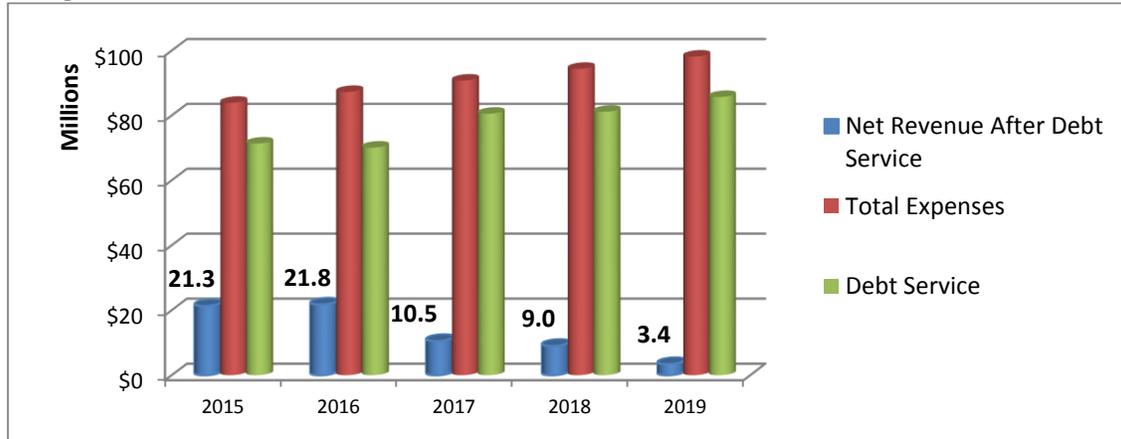


Figure 8 below illustrates the gradual decline in Net Revenues after paying debt service which is the financial buffer needed to maintain sufficient debt service ratios. Total revenues are essentially used for one of three uses: to pay expenses (red below), to pay debt service (green below), and to be available as a financial buffer (blue below).

Figure 8

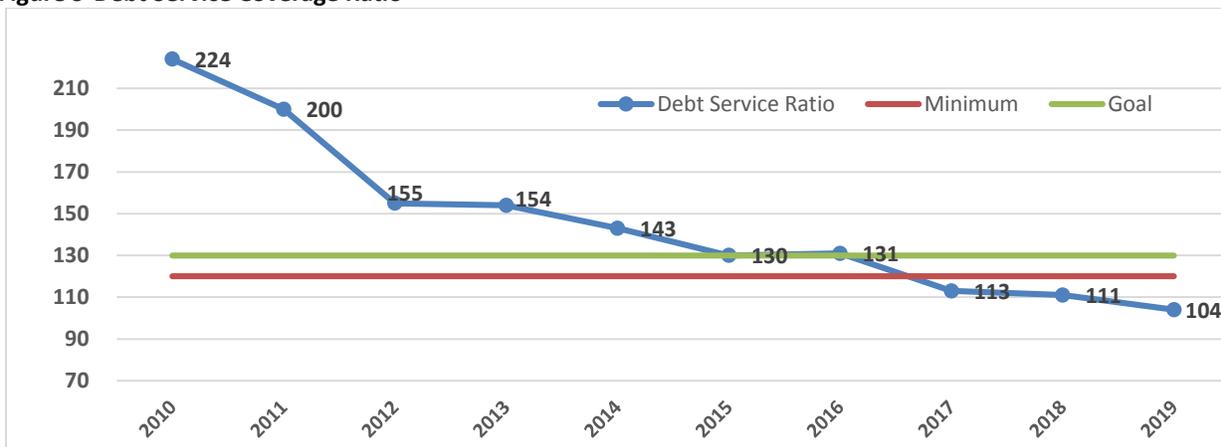


The excess of net revenues over required debt service is one of the key factors used by rating agencies in setting the County’s bond rating for sewer debt. The ratio between those two amounts each year is called the **debt service ratio**:

$$\text{Debt Service Ratio} = \frac{\text{Net Operating Revenues}}{\text{Debt Service Payment}}$$

This year, net operating revenues are projected to be \$92.6 million and debt service is projected to be \$71.3 million, yielding a debt service ratio of 130 percent. By Fiscal Year 2016-17, given the current assumptions of limited growth in revenues and expenses but rapid growth in debt service, the debt service ratio is expected to drop to 113 percent, and continue dropping to a low of 104 percent by Fiscal Year 2018-19. Figure 9 shows the downward trend in the debt service coverage ratio based on current projections in no rate increases are adopted.

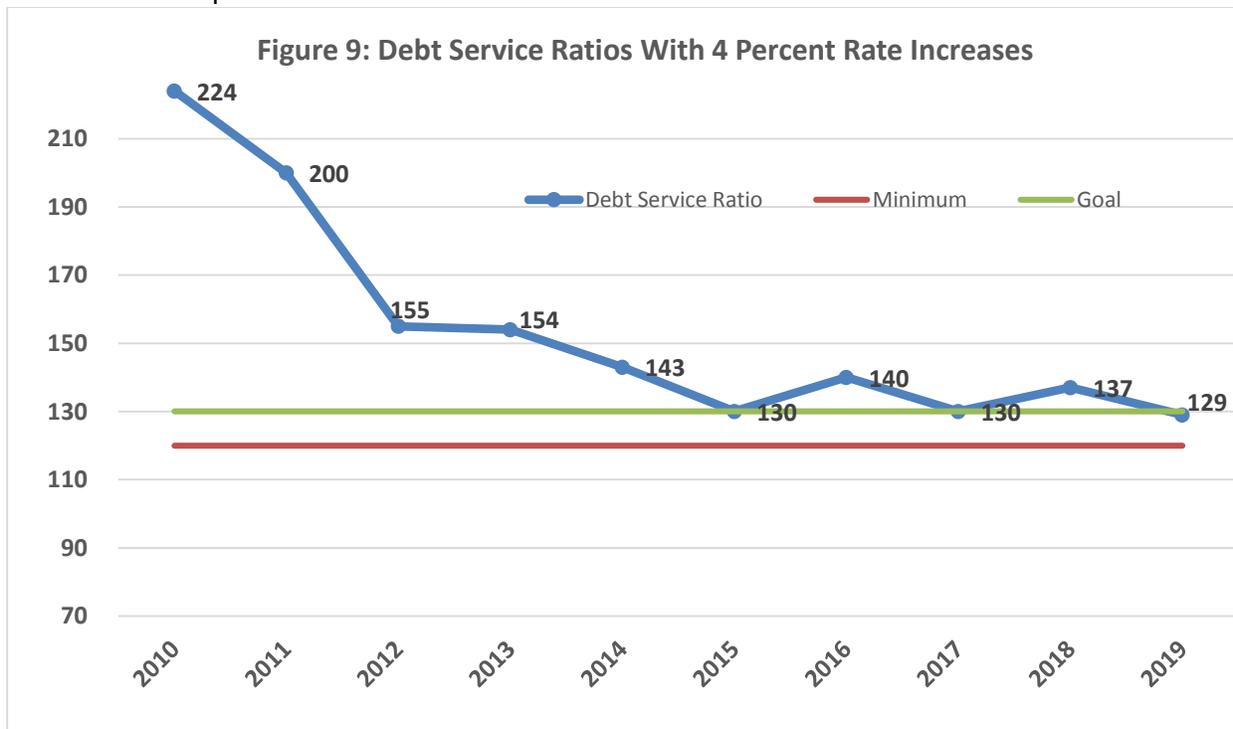
Figure 9 Debt Service Coverage Ratio



Standard & Poor’s rating agency, which rates the County’s sewer debt, has indicated that a debt service ratio of 130 percent is key to maintaining favorable ratings. At its April 18, 2013 meeting, the Regional Wastewater Reclamation Advisory Committee adopted a recommended goal of achieving debt service ratios of 130 percent. Based on the current projections of increases in user fees, connection fees and operating expenses, the County will not be able to maintain adequate debt service ratios without additional rate increases. The County would need either to adopt several modest increases beginning in Fiscal Year 2015-16 or much more substantial increases beginning in Fiscal Year 2016-17. The recommendation by the Finance and Risk Management Department is for the Board of Supervisors to adopt three automatic annual rate increases of 4.0 percent beginning July 1 of 2015, 2016 and 2017, respectively.

The Regional Wastewater Reclamation Advisory Committee Recommendation.

The Finance and Risk Management Department met several times with the Finance Subcommittee of the Regional Wastewater Reclamation Advisory Committee. Although Finance and Risk Management had been recommending rate increases of 4.5 percent of user fees, the Finance Subcommittee moved and approved a recommendation of three annual increase of 4.0 percent. Three annual increases of 4 percent would keep the debt service ratio near 130 for the next four years. Figure 10 below shows the debt service ratio assuming the 4 percent rate increases are implemented.



[TO BE COMPLETED AFTER THE FEBRUARY 19 MEETING: *The full Regional Wastewater Reclamation Advisory Committee considered this recommendation at its January 15, 2015 regular meeting and again at a Special Meeting held on January 29, 2015 to receive public comment. The Committee moved and approved a recommendation of]*

CASH RESERVES

Cash Reserves, Cash Balances and the Expenditure Limitation: 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 as well as to maintain an emergency fund to enable the County to handle unexpected events. Appendix C shows the balances and projected balances of the cash accounts assuming no rate increases are adopted. As of the December 5, 2014 Cash Flow, the Fund had \$195.6 million of cash, of which \$86.9 million is currently unrestricted. The County will be using this unrestricted cash to repay the \$60 million of COPs which are planned to be sold in January 2015 and to prepay debt as discussed in item 4 below. These restricted and designated cash accounts include:

1. **Emergency Reserve Fund** – Beginning in 2010, \$20 million was set aside and designated by the Board of Supervisors as an Emergency Reserve Fund. The fund is for unexpected events affecting the ongoing operations of the system.
2. **Operating Reserve Fund** – The County maintains 90 days of anticipated operating expenses in this restricted fund. This fund currently has approximately \$21 million in reserve. By the end of next fiscal year, these reserves are projected to increase to \$21.8 million.
3. **Debt Service Reserve Fund** – This restricted fund is used to set aside cash for 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. The County has \$32.9 million for debt service reserve in this fund or held either by WIFA or by the trustee bank servicing the sewer revenue obligations. These funds will be applied to the final debt service payments for the respective debt. By the end of next fiscal year, these debt reserves are projected to increase to \$33.1 million.
4. **Use of Unrestricted Cash Balances** – At the March 9, 2010 Board of Supervisors meeting, the Board adopted a series of rate increases and, simultaneously, restricted any unrestricted cash balances to be used for reduction of debt or for rebate of sewer fees. To this end, the County plans to retire debt as soon as outstanding debt instruments are callable. During Fiscal Year 2016-17, the County will call and prepay \$38.1 million of sewer revenue bonds and WIFA loans as they become callable. The County continues to issue Certificates of Participation which are used to fund capital projects for the sewer system.

Unrestricted cash balances are used to repay this debt with accelerated payment schedules between three years and six years. Such actions significantly reduce future debt payments.

EXPENDITURE LIMITATION

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, and any other fees charged for County services, including all fees charged for sewer 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 can use the cash to pay debt service without impacting the expenditure limit. In order to comply with the expenditure limitation, the County must fund sewer capital projects with borrowed funds, and use available unrestricted cash to pay the debt service on such funds. The use of the COPs described above enables the County to finance sewer improvements using relatively short term financing at very favorable rates. Such financing technique allows the County to essentially have a modified “pay as you go” approach to financing sewer improvements.

BOND RATINGS

Rating Agencies: In early 2014, Pima County received ratings from Fitch Ratings and from Standard & Poor’s for debt issued by the County, including sewer revenue debt. The most recent rating reports from these agencies, issued for the January 2014 debt issue gave Pima County sewer debt an AA rating from Fitch and an AA- rating from Standard & Poor’s. Each rating agency issued a report explaining its analysis of Pima County’s financial condition for its sewer debt.

Both rating agencies emphasize the historic willingness of the County to increase rates to provide funds needed for operations and debt service payments. The rating agencies also point to the County’s strong liquidity resulting from the cash held in reserves and the additional cash generated from operations. In its report, Fitch Ratings discussed the County historic willingness to enact necessary rate increases to maintain its financial condition. Standard & Poor’s Rating Services stated that the stable outlook reflects its expectation that the County would adjust sewer rates and fees as needed to maintain total debt service coverage at or above 130.

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, making the overall debt cost to the County lower. For the \$225 million of debt the County will be issuing in the next four years, a decrease in the ratings level would likely cause the County to pay

at least 15 to 20 basis points (0.15% to 0.20%) higher interest rate which would result in about \$2.5 million to \$3.5 million of additional interest over the terms of the debt.

RECOMMENDED RATE INCREASES

Need For Future Sewer Rate Increases:

In order to maintain a debt service ratio of 130 percent, by Fiscal Year 2018-19, the County will need to increase net operating revenues by approximately \$22.3 million. This level of revenues will not be generated from the anticipated growth in the system. It will be necessary to increase user fee rates to sustain the system and complete the planned capital projects.

It is important to maintain such a minimum debt service ratio to maintain Pima County's favorable bond ratings for its sewer revenue bonds. The County still has at least five new debt issues for wastewater improvements before it can begin to rely more on the modified pay-as-you-go approach described above. Pima County just held an election authorizing General Obligation bonds and is considering another possible election for various countywide capital needs that would be funded with General Obligation bonds. If Pima County does not maintain a favorable bond rating for its sewer debt, and if its sewer debt were to be downgraded, the ripple effect on future bond programs could be significant in causing the County to pay higher interest rates on its non-sewer related debt if the voters authorize such debt.

The sewer debt currently outstanding represents about 50 percent of the County's total debt. The County's sewer revenue debt is currently \$649,925,019, not including the County's COP debt relating to sewer projects, which will also be paid using sewer revenues. As discussed above, the County intends to issue an additional \$165 million of new sewer debt and \$60 million of new COPs debt to fund capital projects in the next four years.

In order to maintain adequate bond ratings for existing and future sewer revenue debt, the County needs to continue to adopt rate increases to generate adequate financial resources for the Regional Wastewater Reclamation Enterprise Fund. Based on the analysis contained in this report, the Finance and Risk Management Department and the Regional Wastewater Reclamation Advisory Committee recommend that the Board of Supervisors adopt rate increases of ____ **...TO BE COMPLETED AFTER THE FEBRUARY 19, 2015 MEETING.**

Members of the Advisory Committee requested that this report include a history of rate increases and the dollar impact of such increases. Appendix E contains a history of rates since Fiscal Year 2004 and includes the impact of the recommended 4.0 percent rate increases in Fiscal Years 2016, 2017 and 2018.

RECOMMENDATIONS

Recommendations:

The Pima County Finance and Risk Management Department and the Regional Wastewater Reclamation Advisory Committee is recommending:

1. The issuance of \$60 million of certificates of participation (COPs) in the current fiscal year as anticipated in the Adopted Budget.
2. The issuance of \$165 million of new sewer revenue obligations in the upcoming years as follows:
 - a. \$45 million in Fiscal Year 2015-16,
 - b. \$40 million in Fiscal Year 2016-17
 - c. \$45 million in Fiscal Year 2017-18, and
 - d. \$35 million in Fiscal Year 2018-19.
3. The early repayment of \$38 million of WIFA Loans and sewer revenue bonds as those debts become callable in Fiscal Year 2016-17.
4. The adoption a series of three automatic annual rate increases of 4.0 percent beginning July 1, 2015, July 1, 2016 and July 1, 2017.

List of Appendices

Appendix A – Key Assumptions used for Financial Plan

Appendix B – Five Year Financial Projections Assuming No Rate Increases

Appendix C – Cash Position

Appendix D – Five Year Financial Projections Assuming Three 4.0 Percent Rate Increases

Appendix E – Summary of Rate Increases and Their Impact, Fiscal Years 2004 Through 2015 and Proposed for Fiscal Year 2016 Through 2018.

APPENDIX A

FINANCIAL ASSUMPTIONS BEFORE RATE INCREASES 2015 Wastewater Financial Plan

		Prior Year Actuals	Current Year								Totals	
ASSUMPTION REGARDING:		2014	2015	2016	2017	2018	2019	2020	2015-19	Comments		
1	Population Growth Factors			1.178%	1.517%	1.566%	1.526%	1.526%	1.526%	2014 UA Economic & Business Research Center estimates		
2	User Rate Increases:		0.00%									
	Volumetric Fee increases		0.00%									
	Service Charge		0.00%									
3	Connection Fees Growth Factor			1.178%	1.517%	1.566%	1.526%	1.526%		Rates based on population growth estimates		
4	Annual rate of expense increase		7.70%	4.00%	4.00%	4.00%	4.00%	4.00%		Current year is based on projected expenses. For future years, assumption of 4% growth in operating costs over prior year's actual costs.		
5	Capital Projects		69,719,367	50,708,495	46,003,344	43,671,414	35,296,100		245,398,720	Amounts per RWRD's December 5, 2014 CIP Schedule.		
6	Debt Assumptions	Sewer Obligations	55,000,000	0	45,000,000	40,000,000	45,000,000	35,000,000	165,000,000	COPs size is limited by available collateral and cash for repayment		
		COPS Issues		60,000,000					60,000,000			
7	Interest Rate Assumptions	3.08%	5.50%	5.50%	5.50%	5.50%	5.50%					
8	Cash used to pay down debt quickly:									Total of \$150.5 million used to pay down debt quickly and reduce debt service payments.		
		Debt service on \$60,000,000 issued in 2013	35,574,701	25,250,675					60,825,376			
		Debt service on \$60,000,000 issued in 2015		1,650,000	13,300,000	12,750,000	12,200,000	11,650,000	51,550,000			
		Prepay balance of 2004 WIFA Loan				10,305,275			10,305,275			
		Prepay balance of 2007 Bonds				27,840,000			27,840,000			
			35,574,701	26,900,675	13,300,000	50,895,275	12,200,000	11,650,000	150,520,651			

**SUMMARY OF ACTIVE CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2014/2016 - 2018/2019 AND BEYOND**

Project Name	Expenditures Adopted					FY 2017/18	FY 2018/19	Beyond	Total
	Prior Years	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18				
22nd St Alvernon Way to Swan Rd Augmentation				181,000		2,200,000	4,000		2,386,000
22nd to Congress Osborne to Toole	3,823	591,026							594,849
Addition to RWRD Central Laboratory	2,458,038	3,621,982							6,080,000
ADOT Ina Rd & I-10 Sewer Modifications		150,000	1,800,000						1,950,000
ADOT W Ajo Way & I-19 Sewer Modifications	150,000	1,800,000							1,950,000
ADOT SR86 Valencia Rd to Kinney Rd	2,018,834	1,000							2,019,834
ADOT W Rutherford Rd & I-10 Sewer Modifications		150,000	1,800,000						1,950,000
Arivaca Pump Station	469,383	88,617							558,000
Avra Valley WRF - UV Channel Protective Shade Structure		195,000	30,000						225,000
Avra Valley WRF SCADA & Automation Impr FY 17/18	1,337,159	3,140,842			614,000				614,000
Blugas Sales and Utilization	353,015	105,985							4,477,801
Cardenal Pump Station									459,000
Continental Ranch Regions Pump Station - Second Force Main				610,000		6,330,000	6,896,000	10,000	13,846,000
Continental Ranch Regions Pump Station Security Imprvmt									299,035
Conveyance Rehab - 12th-4th-36th-Ajo	43,658	255,377							271,000
Conveyance Rehabilitation Program									7,000,000
Conveyance SCADA System Upgrade Richey Rd to Ina Rd	776,998	6,999,000	1,000						3,258,579
Corona de Tucson WRF SCADA & Operations Upgrade	170,000	2,481,581							934,615
Corona de Tucson WRF Second Fine Screen	103,551	784,615							
Corona de Tucson WRF Security Improvements	1,049,500	216,500							1,266,000
Corona de Tucson WWTF UV Disinfection & Filtration			1,000,000						1,000,000
COTDOT 22nd St I-10 to Tucson Blvd Sewer Utility				15,000		1,162,000			1,177,000
COTDOT Broadway Blvd Euclid-Campbell Ave Sewer Utility				110,900		4,100			115,000
COTDOT Grant Rd Corridor Improvement Sewer Utility	220,000	231,000	243,000						694,000
COTDOT Houghton Rd I-10 to Valencia Rd Sewer Utility	10,000	45,000	50,000						105,000
CRPFS Facility Modifications	359,845	1,551,212	964,443						2,875,500
DMAFB Flow Meter Station	33,822		303,178						
Dodge Blvd Security Improvements	69,092		332,908						
Green Valley WRF - Future Development Plan FY13/14	4,000,000	2,700,000							402,000
Green Valley WRF SCADA & Automation Improvements	318,117	1,095,883							6,700,000
Green Valley WRF Security Improvements	1,412,716	237,284							1,414,000
Hanson Software Upgrade to Version 8		665,780							1,650,000
Harrison Rd - Millmar Rd to Escalante Rd	1,363,203	1,098,360							665,780
Helen St to Elm St 6th Ave to 1st Ave	4,407	692,717							2,461,563
Houghton Road Broadway Blvd Intersection Improve COTDOT		100,000							697,124
Ina Rd Existing Plant SCADA Upgrades			37,827						137,827
Ina Rd WPCF Class A Biosolids Improvements	2,141,585	508,201	720,000						720,000
Ina Rd WPCF SCADA Process Optimization	655,560	132,417	2,427,281			1,977,960			16,664,327
Ina Rd WRF Emergency Overflow Basin Pump Replacement	200,000	5,000							787,977
Ina Rd WRF Primary Clarifier Concrete Repair	1,911,593	400,000							2,311,593
Ina Rd WRF Rough Screens	410,470	29,030							439,500
Koska Ave Michigan to Pennsylvania	293,748	70,000							363,748
La Cholla Blvd & Calle Pacifica to Speedway Blvd & Silv									285,000
La Cholla Blvd to Mission Rd & Starr Pass to 36th St									263,400
La Tierra Pump Station Conversion to Gravity Sewer									786,000
Minor Rehabilitation Projects FY 13/14	144	131,000	654,856						10,000,000
Minor Rehabilitation Projects FY 16/17	9,800,000	200,000		2,995,000					3,000,000
Minor Rehabilitation Projects FY 17/18									3,000,000
Minor Rehabilitation Projects FY14/15									10,000,000
Minor Rehabilitation Projects FY15/16									3,000,000
Mission Pump Station Rehabilitation	250,000	99,000	5,000						349,000
MI Lemmon WRF SCADA & Automation Improvements	156,945	559,055	2,995,000						716,000
North Rillito Interceptor Rehabilitation	278,919	7,929,000	8,238,081						19,000,000

**SUMMARY OF ACTIVE CAPITAL IMPROVEMENT PROJECTS
FISCAL YEARS 2014/2015 - 2018/2019 AND BEYOND**

Project Name	Prior Years Expenditures	FY 2014/15 Adopted	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	Beyond	Total
North Rillito Interceptor Relief Sewer	1,667,950	3,962,765	69,285					5,700,000
Park Ave Augmentation - Irvington Rd to Drexel Rd	60,000	60,000					2,386,000	2,385,000
PCDOT La Cholla Blvd Magee Rd to Tangerine Rd	4,269,500	230,500						120,000
Prince Rd & I-10 ADOT Sewer Modifications	379,139	142,861						4,500,000
Principal Pump Station								522,000
Quail Creek Lift Station								750,000
Randolph Pk WRF & Pump Station Security Improvements	80,000		50,000	596,000	104,000			670,000
Rincon Valley Chemical Dosing Station	340,000	30,000	590,000					370,000
Rio Nuevo ClPP 60" Rehabilitation Project	675,000	175,000						850,000
Roger Rd WRF Clean Closure	5,285,134	5,000,000	2,000,000					12,285,134
ROMP 32 MGD Reclamation Campus	173,746,988	267,000						174,013,988
ROMP Ina Rd WPCF HPO Replacement	148,276,222	10,000						148,286,222
ROMP SCADA	12,324,907	1,607,053						13,931,960
S. 12th Ave to S. 2nd Ave and W. 22nd St to W. 36th St.								350,850
Sabino Creek Pump Station	614,029	1,022,000						1,636,029
Safe Flush Tanks for Low-Flow Sewers								175,000
Sahuara Bio-Filter								350,000
SCADA Emergency Operations Center	410,000	118,000	231,000					350,000
SCADA WAN Infrastructure Upgrade	241,993		220,000					630,000
SE Houghton Area Recharge Project	216,778	450,000						2,504,000
SE Interceptor Augmentation	155,276	3,134,724	1,700,000	1,000,000	633,222			4,000,000
SE Interceptor Subsurface Biofilter Vapor Treatment Unit	873,987	254,513	4,076,000					7,366,000
Sewer Manhole Rehabilitation # 4	1,492,635	2,000	1,000					1,128,500
Sewer Manhole Rehabilitation # 5								1,494,635
Sewer Manhole Rehabilitation # 7								1,000,000
Sewer Manhole Rehabilitation # 8								800,000
Sewer Manhole Rehabilitation # 6								800,000
Sewer Utility Modification Program								800,000
Side Stream Treatment								800,000
Silverado Pump Station Rehabilitation	350,000	5,467,012						6,245,000
Silverbell Pump Station Rehabilitation								10,667,873
South Rillito West Central Interceptor Rehab								514,000
St Mary's Rd & N Cuesta Ave to Speedway Blvd Silverbell	4,394,023	8,758,801	472,000	1,000	514,000			473,000
State Prison Pump Station Rehabilitation FY13/14			1,173,176					14,326,000
Sub-Regional Facilities Security Improvements	225,000							200,000
System Wide Treatment Rehabilitation & Enhancement	210,315	289,685						913,000
System-Wide Conveyance Rehabilitation Program	380,298	1,500,000	500,000	500,000	500,000	500,000		500,000
System-wide Odor Control Capital Program			4,000,000	11,000,000	11,000,000	11,000,000		3,880,298
System-Wide Sewer Conveyance Augmentation Program	200,000	700,000	3,000,000	3,000,000	3,000,000	3,000,000		37,000,000
Tangerine Rd Force Main Relocation	106,000	803,000						2,949,000
Valencia to Los Reales Camino de la Tierra to Cardinal								15,550,000
Wilmut Rd & I-10 Manhole Rehabilitation								909,000
Regional Wastewater Reclamation Total	1,249,000	1,000	48,821,913	35,163,190	32,576,282	24,708,000	7,714,650	1,250,000
	391,048,299	84,392,158	48,821,913	35,163,190	32,576,282	24,708,000	7,714,650	623,961,941

APPENDIX B

Five Year Financial Projection

Regional Wastewater Reclamation Department Enterprise Fund
 Five Year Financial Projections
 Fiscal Years 2014 through 2019

ASSUMING NO RATE INCREASES

UA growth estimates	1.010	1.0178	1.01517	1.01566	1.01526
Rate factor	1.00	1.00	1.00	1.00	1.00

	Actuals					
	2013-14	2014-15*	2015-16	2016-17	2017-18	2018-19
System Revenues:						
Volumetric User Fee	119,173,601	120,706,864	122,855,446	124,719,163	126,672,265	128,605,284
Fixed User Administrative Fee	40,606,107	41,095,753	41,827,257	42,461,777	43,126,728	43,784,842
Sanitation Fees	237,991	310,000	310,000	310,000	310,000	310,000
Total Sewer Utility Service	160,017,699	162,112,617	164,992,704	167,490,940	170,108,994	172,700,126
Sewer Connection Revenue	11,397,156	13,019,091	13,250,831	13,451,846	13,662,502	13,870,992
Other Income (including interest earnings)	2,855,990	1,409,605	858,360	862,002	746,545	690,274
Total Revenues	174,270,845	176,541,313	179,101,894	181,804,788	184,518,041	187,261,392
Operations and Maintenance Costs	77,893,135	83,897,520	87,253,421	90,743,558	94,373,300	98,148,232
Net Revenues	96,377,710	92,643,793	91,848,474	91,061,230	90,144,741	89,113,160
Total Existing Debt Service Payments	66,514,667	71,332,392	68,848,604	74,577,934	70,804,120	70,907,907
Proposed Debt Service	896,511	-	1,237,500	5,954,897	10,323,358	14,792,119
Total Debt Service Payments	67,411,178	71,332,392	70,086,104	80,532,831	81,127,478	85,700,026
Debt Service Coverage = Net Revenues / Total Debt Service Payments	1.43	1.30	1.31	1.13	1.11	1.04
Debt Service Coverage - Bond Rating Agency	1.26	1.12	1.12	0.96	0.94	0.88
Debt Service Coverage - excluding non-recurring revenue						

* Based on most recent 2015 Projections

CIP Projections used as of December 5, 2014		69,719,367	50,708,495	46,003,344	43,671,414	35,296,100	245,398,720
Planned Debt issues	Sewer Revenue debt		45,000,000	40,000,000	45,000,000	35,000,000	165,000,000
	County COPs	60,000,000					60,000,000

APPENDIX C

Regional Wastewater Reclamation Enterprise Fund

Cash Position

As of December 5, 2014 Cash Flow

Revised: 12/5/14

Created by: Finance and Risk Management

	2014-15	2015-16	2016-17	2017-18	2018-19
Operations	131,668,199	135,268,480	97,746,428	79,201,662	66,562,135
Debt Proceeds for CIP Projects	63,903,923	58,231,663	53,379,340	56,863,716	56,811,753
Total	195,572,122	193,500,144	151,125,767	136,065,378	123,373,888
Reserves					
O&M - Operating Reserve	20,974,380	21,813,355	22,685,889	23,593,325	24,537,058
Debt Service Reserve - Existing	3,786,142	1,620,593	1,641,148	1,656,177	1,671,064
Debt Service Reserve - Obligations	29,084,875	31,507,011	33,623,604	35,996,422	37,817,910
Construction - Obligations	28,835,711	21,542,977	15,147,537	16,281,796	15,287,753
Deposits Held in Escrow	-	-	-	-	-
Construction - Contract Retention	5,983,336	5,181,676	4,608,199	4,585,498	3,706,091
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	86,907,677	91,834,532	53,419,390	33,952,160	20,354,013

APPENDIX D

Five Year Financial Projection

Regional Wastewater Reclamation Department Enterprise Fund
Five Year Financial Projections
Fiscal Years 2014 through 2019

ASSUMING THREE 4% RATE INCREASES

UA growth estimates	1.010	1.0178	1.01517	1.01566	1.01526
Rate factor	1.00	1.04	1.04	1.04	1.00

	Actuals					
	2013-14	2014-15*	2015-16	2016-17	2017-18	2018-19
System Revenues:						
Volumetric User Fee	119,173,601	120,706,864	127,769,664	134,896,247	142,489,071	144,663,454
Fixed User Administrative Fee	40,606,107	41,095,753	43,500,348	45,926,658	48,511,704	49,251,993
Sanitation Fees	237,991	310,000	310,000	310,000	310,000	310,000
Total Sewer Utility Service	160,017,699	162,112,617	171,580,012	181,132,905	191,310,775	194,225,447
Sewer Connection Revenue	11,397,156	13,019,091	13,250,831	13,451,846	13,662,502	13,870,992
Other Income (including interest earnings)	2,855,990	1,409,605	858,360	862,002	746,545	690,274
Total Revenues	174,270,845	176,541,313	185,689,203	195,446,753	205,719,822	208,786,713
Operations and Maintenance Costs	77,893,135	83,897,520	87,253,421	90,743,558	94,373,300	98,148,232
Net Revenues	96,377,710	92,643,793	98,435,782	104,703,195	111,346,522	110,638,481
Total Existing Debt Service Payments	66,514,667	71,332,392	68,848,604	74,577,934	70,804,120	70,907,907
Proposed Debt Service	896,511	-	1,237,500	5,954,897	10,323,358	14,792,119
Total Debt Service Payments	67,411,178	71,332,392	70,086,104	80,532,831	81,127,478	85,700,026
Debt Service Coverage = Net Revenues / Total Debt Service Payments	1.43	1.30	1.40	1.30	1.37	1.29
Debt Service Coverage - Bond Rating Agency	1.26	1.12	1.22	1.13	1.20	1.13
Debt Service Coverage - excluding non-recurring revenue						

* Based on most recent 2015 Projections

CIP Projections used as of December 5, 2014		69,719,367	50,708,495	46,003,344	43,671,414	35,296,100	245,398,720
Planned Debt issues	Sewer Revenue debt		45,000,000	40,000,000	45,000,000	35,000,000	165,000,000
	County COPs	60,000,000					60,000,000

APPENDIX E

**Summary of Rate Increases and Their Impact
Fiscal Years 2004 Through 2015, and
Proposed for Fiscal Years 2016 through 2018**

Fiscal Year	Percent Rate Increase	Dollar Impact on Average 8cccf Bill	
2004	0	0.00	
2005	4	0.56	
2006	8	1.16	
2007	12	1.89	
2008	15	2.64	
2009	22	5.14	
2010	26	3.68	
2011	10	2.57	
2012	10	2.80	
2013	10	3.04	
2014	10	3.33	
2015	0	0.00	
2016	4	1.63	Proposed
2017	4	1.70	
2018	4	1.77	
2019	0	0.00	